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THE

NAVIGATOR:

CONTAINING DIRECTIONS FOR NAVIGATING

THE

MONONGAHELA, OHIO, AND
ALLEGHANY, MISSISSIPPI

RIVERS;

WITH AN AMPLE ACCOUNT
OF THESE MUCH ADMIRED WATERS,
FROM THE
HEAD OF THE FORMER TO THE MOUTH OF THE LATTER;
AND A CONCISE DESCRIPTION
OF THEIR
TOWNS, VILLAGES, HARBOURS, SETTLEMENTS, &c.

WITH ACCURATE MAPS OF THE OHIO AND MISSISSIPPI.

TO WHICH IS ADDED

An Appendix,

CONTAINING
AN ACCOUNT OF LOUISIANA,
AND OF
THE MISSOURI AND COLUMBIA RIVERS,
AS DISCOVERED BY THE VOYAGE UNDER
CAPTAINS LEWIS AND CLARK.

SIXTH EDITION—IMPROVED AND ENLARGED,

PITTSBURGH,
PUBLISHED BY ZADOK CRAMER AND SOLD AT HIS
BOOKSTORE, MARKET-STREET.
[PRICE ONE DOLLAR.]

FROM THE PRESS OF CRAMER & SPEAR.....1808.

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DISTRICT OF PENNSYLVANIA, TO WIT:

(L. S.) BE IT REMEMBERED, that on the nineteenth day of September in the thirty-third year of the Independence of the United States of America, A. D. 1808, *Zadok Cramer*, of the said District, hath deposited in this Office, the Title of a Book the right whereof he claims as Proprietor in the words following, to wit:

"The Navigator, containing directions for Navigating the Monongahela, Alleghany, Ohio and Mississippi rivers; with an ample Account of these much admired Waters, from the head of the former to the mouth of the latter; and a concise description of their Towns, Villages, Harbours, Settlements, &c. with accurate Maps of the Ohio and Mississippi. To which is added an Appendix, containing an Account of Louisiana, and of the Missouri and Columbia rivers, as discovered by the Voyage under Captains Lewis and Clark. Sixth Edition—Improved and enlarged."

In conformity to the act of the Congress of the United States, intituled, "An Act for the Encouragement of Learning, by securing the Copies of Maps, Charts, and Books, to the Authors and proprietors of such Copies during the times therein mentioned." And also to the Act, entitled "An Act supplementary to Act, entitled, "An Act for the Encouragement of Learning, by securing the Copies of Maps, Charts, and Books, to the Authors and Proprietors of such Copies during the times therein mentioned," and extending the Benefits thereof to the Arts of designing, engraving, and etching historical and other Prints."

D. CALDWELL, *Clerk of the District of Pennsylvania.*

REFERENCES TO THE MAP OF PITTSBURGH.

0 Episcopal church, situated on the angle formed by the junction of Liberty and Wood streets. 1 Court house, on the opposite side of the street is the Market house. 2 Presbyterian meeting house. 3 Dutch Lutheran church. 4 Office of discount and deposit. 5 Fort Fayette. 6 Covenanters' meeting house. 7 Ship-yard, immediately below which Suke's run empties in. 8 Jail. 9 Ruins of Fort Pitt. 10 Scite of Fort Du Quesne. 11 Glass-works. 12 Academy. —On the N. side of the Alleghany, are two ferry-houses, the uppermost belongs to major Craig and the next below to James Robinson, esq. On the S. side of the Monongahela the first house above the glass-works is Jones's ferry, the next above Black's or Beattie's, the next Bousman's, the next widow Craig's, the next Herd's, and, about half a mile above this, though not mentioned in the map, is Emmet's, and opposite to it is Andrew Watson's, esq.—On the right side of the Ohio, and opposite the entrance of the Alleghany is a small island, about half a mile long. Some years since the state of Pennsylvania granted this island to colonel Killbuck, an Indian chief of the Six Nations, by whom it is still held. It is now called Smoky Island.—The hill to the S. of the Monongahela is Coal hill; that jutting out close to the ship-yard, is called *Gallows-hill*, from the circumstance of a gentleman of the name of Boyd having hung himself on it.

The point of Grant's hill (not represented) enters the square formed by Fourth-street, Hammond alley, Cherry alley, and Grant's street.

The streets running parallel to the Alleghany, are, first, Penn, and next Liberty; the cross-streets from Liberty to the Alleghany, are, beginning at the lowermost, Marbury and Hay streets, —— alley, Pitt street, —— alley, St. Clair street, —— alley, Irwin's street, ——alley, Hand street, —— alley, Wayne street. Those running parallel with the Monongahela are, first, Water, Front, Second, Third and Fourth streets, Hammond alley, Fifth street, Virgin alley, Sixth street, Strawberry alley, Seventh street, Plumb alley, Eighth street. The streets and alleys intersecting these are, beginning at the lowermost, West street, Short street, Redoubt alley, Ferry street, Chancery lane, Market street, Wood street, Smithfield street, Cherry alley, Grant street.

It may be noted that none of the streets cross each other at right angles except those from Liberty street to the Alleghany.

☞ The top of the map is due north, the bottom south, the right east, and the lower part west.

MAP or PITTSBURGH.
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☞ *THIS edition of the* NAVIGATOR, *being the sixth since the year* 1801, *is respectfully presented to the public. It being designedly calculated as an useful and necessary guide to those who navigate or trade on the rivers of which it treats, much pains have been taken to revise, correct, and enlarge it throughout; to do this satisfactorily, we have had the assistance of several of the most eminent pilots and navigators, and the use of late manuscript journals of gentlemen of observation, to whom we present our compliments for their aid and politeness.*

At a very considerable expence, the maps of the Ohio and Mississippi rivers are now added; and we flatter ourselves with the hope that they will be found as useful to the navigator as they have been troublesome to us.—These of the Ohio have been taken from actual survey—Those of the Mississippi partly from survey and partly from private charts, taken as accurately as the nature of that river will permit.

To this edition we have added a short account of the MISSOURI *and* COLUMBIA *rivers, as traversed by captains Lewis and Clark, under the direction of the president of the United States. This, though but a brief view of that interesting voyage, we hope will be found entertaining. It has been collected from the letters of captain Clark and other publications since the return of the party.*

The account of LOUISIANA *is highly interesting; and it has been collected from documents published by the directions of the congress and executive of the United States, shortly after the acquisition of that country.*

Conscious of the imperfections of our little book, we depend much on the goodness of others to detect its errors and point them out to us, in order that they may be corrected in a future edition; observations, also, either of the rivers or the country through which they run, tending to enhance its value and make it more generally useful, will be thankfully acknowledged.

Upon the whole, we can assure the reader, that we have spared no pains to make this an useful book, and nothing is wanting but his aid as an encouragement to continue our labours to make it still more so.

THE EDITOR.

April, 1808.

GENERAL DESCRIPTION

OF

The Rivers.

OF THE MONONGAHELA.*

NO country perhaps in the world is better watered with limpid streams and navigable rivers than the United States of America, and no people better deserve these advantages, or are better calculated to make a proper use of them than her industrious and adventurous citizens.

The Monongahela takes its rise at the foot of the Laurel mountain, in Virginia, thence meandering to a N. by E. direction, passes into Pennsylvania, and receives Cheat river from the S. S. E. thence winding to a N. by W. direction, separates Fayette and Westmoreland from Washington county; and passing into Allegheny county, receives the Youghiogheny river from the S. S. E. and unites with the Allegheny river at Pittsburgh, 13 miles below the mouth of the Yough, and about 55 by land, below the mouth of Cheat. The Monongahela is about 450 yards wide at its mouth, measuring from bank to bank, and in the fall and spring freshes has water enough to carry ships of 400 tons burden; these freshes, however, subside quickly, and render the navigation of such vessels very precarious.

The Monongahela, after it enters Pennsylvania, runs through a rich and well settled country. Its waters when high are coloured with the washy disposition of the clay-

* This word is said to signify, in some of the Indian languages, *The Falling-in-Banks;* that is, the stream of the Falling-in, or Mouldering Banks.

loam land, of which is borne down with its current a thick sediment. Its banks are generally firm, bearing large and stately trees of the button wood, hickory, white and black oak, walnut, sugar-maple, beach, &c. and these afford a good supply of logs for the numerous saw-mills erected at and near the mouths of the creeks emptying into the river.

This river, like most others in this country, is accompanied with a considerable hill on each side, which sometimes approach close to the banks, and again recede, leaving spacious and rich bottoms, in which are generally found large sugar-camps, each sugar tree producing, if well managed during the season, four pounds of excellent sugar, equal to the Musquevado, especially if it has time to ripen before used; and each pound is worth 13 cents; thus, a sugar-camp containing 500 trees produces 2000 pounds of sugar, worth 260 dollars. The sugar season seldom lasts more than a month or six weeks, and a camp of this size can be attended by one man and three or four boys to carry the water,—thus leaving a handsome salary for each during a season that very little else can be done on a farm. The sugar season sometimes however is precarious, owing to the irregularity of the breaking up of winter, and the ushering in of spring. But it certainly would be provident in farmers to take special care of their sugar trees, and rather than destroy a grove of 50 trees, plant an orchard of 1000. In order to give a spur to this species of economy, our merchants ought not to receive a pound of sugar from over the mountains, and by this means give every encouragement for the use and consumption of sugar made at home. This would stimulate the farmer and reward the labourer. The policy of such a plan would be wise, and be the means of saving many thousands of dollars in the country, which are now sent out for sugars of different kinds. Indeed I do not see why loaf and lump sugar could not be manufactured from our maple sugar as good as that produced from the West India cane.

The land being generally rich on the Monongahela, crops of wheat, rye, barley, oats, buckwheat, corn, potatoes, &c. are raised in great abundance; flax and hemp are too much neglected. The Monongahela flour is celebrated in foreign markets, for its superiority, and it gene-

rally sells for one dollar more per barrel in New Orleans than any other flour taken from this country to that market. The best and greatest quantity of rye whiskey is made on this river. Peach and apple brandy, cider and cider-royal, are also made in great abundance.

The mean velocity of the Monongahela, is about two miles an hour, and from three to four miles when very high. The floods seldom rise above the common banks; when they do, it is noticed as remarkable, and much mischief is done by the sweeping waters, as was the case in May, 1807, when the floods rose at Brownsville about 37 feet above the common surface of the river. It is said that at least 15 grist mills, on and near the river, between Pittsburgh and Morgantown, were carried off and destroyed during this fresh, and with them about 5,000 bushels of wheat, rye, and corn. Several mills were seen floating past Pittsburgh in one day, out of which skiff loads of wheat were taken by the citizens.

The navigation of the Monongahela is pretty good in its middling state of water, for periogues, keels, canoes and skiffs from Pittsburgh to Brownsville, and from thence to Morgantown, a distance of about 100 miles above its mouth; above this the navigation is frequently interrupted by rapids, but small craft may with difficulty go up as high as Clarksburgh, about 40 miles above Morgantown. The West branch of this river in high water is navigable for 15 miles, and communicates with a Southern branch of Little Kanhawa, by a portage of eight or ten miles.

It is matter of much importance that an easy and short portage could be had to connect the waters of the Potomack with those of the Monongahela. The head waters of Cheat and the Potomack, come together within about 30 miles, to which portage however, the navigation of both rivers is difficult, but might be rendered much better by clearing them out. Goods are at this time frequently boated up from Alexandria, Georgetown, &c. as high as Fort Cumberland, whence they are taken in waggons to Brownsville, a distance of about 80 miles.—By this route it costs about $2 50 per hundred pounds, from Alexandria to Brownsville, which is a saving of about $2 50 in the 100 lb. when brought all the way by land.

On the Monongahela old fortifications are frequently discovered, as vestiges of a people of whom time has kept no

other record, and of whose character the present race of man can form but a feint idea; for like the mammoth, they have left nothing behind them but evident marks of their once having possession of the country, and having been well acquainted with the arts of war, and perhaps as well with those of peace, if we may judge from the quantity and quality of pottery, and many other articles of household convenience, found all through this country, as well as in many parts of the U. States; all shewing the work of ingenious artists. Curious carving on rocks, are to be seen on many parts of the Monongahela. At the mouth of Ten mile creek, above Redstone, there are many; some bearing the shape of a man's foot, a horse's foot, a hand, head, a turkey, a fish, a gun, birds, beasts, &c. all evidently carved by a people having had more tools than our Indians can be supposed to have had in those early periods of time. Of the nation of people having left those curious traces behind them, some ingenious writers are strongly disposed to believe them to have been from Wales in Britain. How they became extinct, be they whom they might, is a question equally difficult of solution.

One of the principal branches of the Monongahela is the Youghiogany river, whose sources are divided from those of the Potomack by the Allegheny mountain; from the falls, where it intersects the Laurel mountain, to Fort Cumberland, the head of the navigation of the Potomack, is 40 miles of very mountainous road. On the Yough and the streams emptying into it, are a number of valuable forges, furnaces, saw and grist mills, some fine farms and villages, among which Connelsville, 45 miles by land above Pittsburgh, is the principal one.

OF THE ALLEGHENY.

THIS is a beautiful, large, and navigable river, taking its rise in Lycoming County, Pennsylvania, within a few miles of the head waters of Sinemahoning creek, a navigable stream that falls into the Susquehanna river, to which there is a portage of 23 miles. Thence pursuing a North course, passes into New York state, winding to the N. W. about 20 miles, turns gradually to the S. W. enters Penn-

sylvania, and meandering in about that direction 180 miles, joins the Monongahela at Pittsburgh.

Few rivers and perhaps none excel the Allegheny for the transparency of its water, or the beauty of its bottom, having a fine gravelly bed, clear of rocks and uninterrupted with falls. Its surface is unbroken, and its mean velocity is about $2\frac{1}{2}$ miles an hour; when high it runs at the rate of about four miles an hour, being a little more rapid in its course than the Monongahela. Its waters in some instances have proved medicinal; and the fish caught in it are allowed to be superior to those of the Monongahela.

The Allegheny in its windings receives many large and tributary streams: among these are the Kiskimenetas, which is navigable for batteaux 40 or 50 miles, and good portages are found between it and the Juniata; it enters the Allegheny at Kittanning, the county town of Armstrong county, Pa. lat. 40.° 40′, 45 miles above Pittsburgh. The Kiskimenetas receives in its course Little Conemaugh and Stone creek, which form its head waters; after their junction it is called Conemaugh river; it then receives Black Lick from the N. E. and 17 miles from its mouth Loyalhanna creek enters from the S. S. E.—Muhulbucktitum, it is passable in small crafts to the settlements in Northumberland County, Wheeling is its Northern branch.—Toby's creek enters the Allegheny 20 miles below Fort Franklin, may be navigated in flat-bottomed boats a considerable way up, thence by a short portage to the West branch of Susquehanna, by which a valuable communication is formed between the Ohio country and the Eastern parts of Pennsylvania.—French creek, is a N. Western branch of the Allegheny, and enters it at Fort Franklin, 80 miles N. E. of Pittsburgh; it is navigable to Le Bœuf, now called Waterford, from whence to Erie there is a portage of 15 miles, on which a turnpike is now erecting.

The Allegheny affords another communication to Lake Erie by way of the Canowanga creek, at whose head is a small lake called Chatacque, thence to Portland, a new town lately laid off by Mr. Iohn M'Mahon on the bank of lake Erie, there is a good portage of but 9 miles. A small creek, called Chatacque, enters lake Erie at Portland, which is about 30 miles below the town of Erie, in the State of New York.

The trade carried on between the lakes and the Ohio, by way of the Allegheny and its branches, is at this time very considerable, and must in a few years become of great importance. There are about 4000 or 5000 barrels, and sometimes more, of Onondago salt brought down to Pittsburgh annually, worth per barrel 9 dollars, making an average of about 40,000 dollars worth of traffic in this one article. Exclusive of the article salt, there are an immense number of boards, shingles, and lumber of different kinds, floated down to Pittsburgh and the country below on the Ohio. The quantity of boards and lumber that arrive yearly at Pittsburgh from the Allegheny, is supposed to be about 3,000,000 feet, averaging about 9 dollars per 1000 feet, amounting to 27,000 dollars; this added to the amount of the salt, makes the handsome sum in domestic trade of 67,000 dollars.

In return the keel boats ascend loaded with whiskey, iron and castings, cider, apples, bacon, and many other articles of home production—and merchandize of foreign importation.—As long as the water keeps good, that is, neither too high nor too low, boats are ascending and descending continually, making a trip up in about 17 days, and down in 5 days.

It has been suggested that goods might be brought by water from New York to Pittsburgh by way of the lakes and this river, for three cents a pound, which is one half less than is generally given from Philadelphia to Pittsburgh. By this Northern route, which would certainly be a very long and tedious one, there would be a portage of 15 miles from Albany on the Hudson or North river to Schenectada on the Mohawk, thence up that river and through Wood creek into lake Ontario, thence up Niagara river to the falls, thence 10 miles around Niagara falls, thence by water up Erie lake to the town of Erie, thence 15 miles portage to Waterford or Le Bœuf, thence down French creek and Allegheny river, making in all a land carriage of 40 miles from New York to Pittsburgh, a distance by this route of not less than 850 miles.

The brig Dean, Galley Ross, and several other vessels of burden were built on the Allegheny, and we hope to see many more borne down by the current of this beautiful stream.

The Allegheny river joins the Monongahela nearly at right angles, and its current being more rapid, it general-

ly marks its course across the mouth of the latter river, and forces the current of the Monongahela on the opposite shore with great impetuosity. Though their streams are now united, the clear and transparent water of the one and the muddy appearance of the other, form a singular contrast, and this difference is plainly observable ten or fifteen miles below their junction.

The Allegheny is about 400 yards wide at its mouth, and when Smoky island lying to the N. W. is washed away it will be nearer eight.—It runs through an immense tract of country, much of it rough and hilly land, the greater part of which is yet to be settled.—This river as well as the Ohio, are known and called by the name of Allegheny river by the Seneca, and other tribes of the Six Nations of Indians, from its head waters until it enters the Mississippi.

Among the natural advantages of the waters of the Allegheny, is *Oil* creek, which empties into that river about 100 miles from Pittsburgh. This Creek issues from a spring on the top of which floats an oil similar to that called Barbadoes tar, and is found in such quantities that a person may gather several gallons a-day. The oil is said to be very efficacious in rheumatic pains, rubbed on the parts affected. The troops sent to guard the Western Posts, halted at this spring, collected some of the oil and bathed their joints with it ; this gave them great relief from the rheumatic complaints, with which they were afflicted. They also drank freely of the water, which operated on them as a gentle cathartic.

This oil is called *Seneca Oil* in Pittsburgh, probably from its first having been discovered and used, by a nation of Indians of that name.

It is a wise plan in Nature, to generally place an antidote where she has planted a poison.—No climate perhaps is more subject to pains of the rheumatic kind than ours, arising from the sudden transitions of heat to cold, and vice versa—and if it be true that the qualities of this oil are so effectual in the cures of diseases to which we are more or less subject, from the nature of our climate—it is equally true that Nature in her wisdom, has not been unmindful of her general plan of providing a good for an evil in this particular instance.

On the Allegheny and French creek, there are large bo-

dies of low lands, covered with fine white pine and hemlock. These are noble trees, measuring from three to five feet in diameter at the butt ; are remarkably tall and straight, and without limbs to near the top. They are well calculated for masts of ships, and can be floated down in high water with ease to Pittsburgh, thence down the Ohio and Mississippi ; the heavy sediment of the latter river however, would perhaps tend to sink them and make them troublesome to float.—These white pine swamps afford also an immense number of excellent boards, and shingles and lumber of different kinds, of which Pittsburgh consumes annually about 2,000,000 feet ; and rafts are frequently taken down as low as Beaver, Wheeling, Marietta, and Cincinnati, and sold at from 90 cents to $ 1 50 per hundred feet, advancing the price as they descend. Boats go loaded with pine boards even to New Orleans, where they sell for about 3 dollars per 100 feet.

OF THE OHIO.*

THE junction of the Allegheny and Monongahela rivers form the Ohio, and this discharges itself into the Mississippi, (in N. Lat. 36° 43′ Hutchins—37° 0′ 23″ and W. Long. 5° 55′ 38″ according to Mr. Ellicot†) about 1188

* This name is said to signify in some of the Indian Languages, Bloody ; so that the Ohio river may be translated the River of Blood.

† Mr. Ellicot in his Journal down the Ohio, having arrived at the mouth of that river, observes, " On the top of the stump of a large tree, to which the zenith sector was fixed, a plate of lead was laid, containing the latitude and longitude of that place. The stump was then covered by a mound of earth of considerable magnitude ; but which will probably be demolished in a few years by the annual inundations." Mr. Ellicot and his party were detained at the mouth of the Ohio, in consequence of the inclemency of the season, from the 18th Dec. 1796, to the 31st of January following, during which period, he ascertained from accurate observations, the latitude and longitude of the junction of the Ohio and Mississippi rivers as above stated. It may be proper to inform the reader that Mr. And. Ellicot was appointed commissioner on the part of the U. S. for determining the Boundary between them and the possessions of his Catholic majesty, from the year 1796 till 1800.

computed miles from Pittsburgh. The Ohio in its passage to the Mississippi, glides through a pleasant, fruitful, and healthy country, and carries a great uniformity of breadth, from 400 to 600 yards, except at its confluence with the Mississippi and for 100 miles above it, where it is 1000 yards wide; about 100 miles above the falls, which are 705 miles below Pittsburgh, it is 700 yards wide.

The Ohio has been described, as "beyond all competition, the most beautiful river in the universe, whether we consider it for its meandering course through an immense region of forests, for its clean and elegant banks, which afford innumerable delightful situations for cities, villages and improved farms: or for those many other advantages, which truly entitle it to the name originally given it by the French, of *La Belle Riviere*, that is, the Beautiful or Fair river." This description was penned several years since, and it has not generally been thought an exaggerated one. Now the immense forests recede, cultivation smiles along its banks, towns every here and there decorate its shores, and it is not extravagant to suppose, that the day is not very far distant when its whole margin will form one continued village.

The reasons for this supposition are numerous—the principal ones are, the immense tracts of fine country that have communication with the Ohio by means of the great number of navigable waters that empty into it; the extraordinary fertility, extent, and beauty of the river bottoms, generally high, dry, and with few or no exceptions, remarkably healthy, and the superior excellence of its navigation, through means of which, the various productions of the most extensive and fertile parts of the United States, must eventually be sent to market.

For 30 miles below Pittsburgh it takes a N. W. course, then turns gradually to the W. S. W. and pursuing that course for about 500 miles, turns to the S. W. for nearly 170 miles, then it turns westward 280 miles, thence S. W. 180 miles, and empties itself into the Mississippi, in a flat and swampy country, where there are no hills to variegate the scene, nor mountains to overtop the union of these two noble streams.

The numerous islands that are interspersed in this river, in many instances, add much to the grandeur of its appearance, but they embarrass the navigation, considera-

bly, particularly in low water, as they occasion a great many shoals and sandbars. The soil of the islands for the most part is rich, timber luxuriant, and the extent of many of them considerable. Fruit is raised to great perfection on them, and seldom fail of a crop, as is generally the case in all the river bottoms.

In low water the navigation of the Ohio is difficult to the old Mingo-town,* about 75 miles below Pittsburgh; from thence to the Mississippi it is good for keel boats or barges carrying from 100 to 200 tons burden; up from thence it may be navigated with smaller crafts. In times of high water, vessels of 400 tons burden can descend with ease, except the difficulty arising from managing so unwieldy a bulk at the points of islands and short turns in the channel of the river. Vessels of this tonnage have descended from Pittsburgh to Orleans in safety, but the chance of good water renders the undertaking a little hazardous. The Falls, however are much the greatest impediment, for unless vessels happen to hit the time of the highest stage of the water, they are either detained perhaps till the next season, or if they attempt a passage over them, a wreck in part or in whole may be the consequence, in either case putting in jeopardy property to an amount that few individuals can bear the loss of. A lock-canal round the Falls would remove this difficulty, and be of an immense advantage to the Ohio trade, and to the people on or near the river from the Falls up to the heads of the Allegheny and Monongahela rivers. There has been some talk of attempting the commencement of this lock-canal. What jarring and clashing interests prevent the undertaking, are not easily to be found out. It can scarcely be supposed to be the want of a public spirit in the Kentuckians or their Legislature.

There are many smaller impediments, however, in the river from Pittsburgh to the Mingo-town, which may be as long getting removed as even the Falls themselves: these consist of rocks that might be blown to pieces, and ripples that might be easily cleared out in such a way as to make the channel good through them. This is certain-

* This was the only Indian village in 1766 on the banks of the Ohio from that place to Fort Pitt; it contained at that time 60 families.

Hutchins.

ly an important national concern, but the people must begin to act first, before their representatives will bring the thing forward in the house of General Assembly. It must be done by grants of monies from the State, aided by subscriptions from the people ; both must be liberal and vigilant, or the object will never be accomplished.

The consideration for opening the navigation of the Ohio, has become a matter of greater importance and necessity for the interest of Pennsylvania now than ever before. The United States road from Cumberland on the Potomack, to Wheeling on the Ohio, when completed will naturally draw a great deal of the trade of the northern States, to the States of Ohio, Kentucky, Tennessee, and to Louisiana, through that channel, thereby abridging very much the trade from those States through Pennsylvania. Therefore if Pennsylvania looks closely to her own interests, she will find that the completing the turnpike road from Harrisburgh to Pittsburgh, and opening the navigation of the Ohio, are the two principal objects which will tend to secure to her, her usual commercial, foreign and domestic, advantages. Exclusive of the probability of the United States' road drawing the trade to the south of Pennsylvania, New York state, on the north, is pushing her inland navigation, and opening easy communications from one end of the State to the other, by way of turnpikes, canals, &c. to an extent unparalleled in any other State in the Union. The spirit of the people in the back part of the State of New York is peculiarly turned to this point, and no exertions seem to be lacking in the industry of the one class, or money wanting from the other. The purses of the one and the labour of the other seem to be happily united for the good of the whole. When this is the case a State must flourish in her internal improvements, and of course advance to wealth and independence.

The Ohio has on its left in descending, a part of Pennsylvania as far as the mouth of Mill creek ; Virginia to the mouth of Big Sandy river ; and Kentucky about 60 miles below the mouth of the Ohio. On the right, Pennsylvania to the line crossing just below the mouth of Little Beaver ; Ohio from thence to the mouth of the Great Miami ; and below this the Indiana Territory.

It receives in its course many large and navigable streams, the principal of which are ; On the right, Big

Beaver, Muskingum, Sciota, Little and Great Miami, and the Wabash. On the left, Little and Great Kanhawa, Sandy, Licking, Kentucky, Green, Cumberland, and Tennessee rivers :—These will be more particularly mentioned as we go on with directions for navigating the Ohio.

The fish of the Ohio are numerous and of various kinds: the black and yellow cat, weighing from 3 to 100 pounds; the buffaloe, from 5 to 30 pounds; the pike from 4 to 15 pounds; the sturgeon from 4 to 40; the perch from 3 to 12 pounds; the sucker from 1 to 6 pounds; a few herrings are sometimes caught, and in the spring of 1805, several shad were caught and sold in the Pittsburgh market, weighing about two pounds; eels and soft shelled turtles are sometimes caught.—These ascend the Allegheny and Monongahela rivers, and their principal branches, and are caught in seines, baskets, pots, and with trot-lines, hooks and lines, &c. The different species of the wild duck are numerous, and a few geese, brant, &c. are sometimes seen on the river. Turkies, pheasants and partridges, are numerous on its banks; these, with the opportunity of sometimes shooting bears and deer swimming across the river, afford much pleasure to the navigator, and form sumptuous meals to the boat's crew. Boats, to take advantage of this profitable amusement, are generally well provided with ammunition and fire-arms.

The principal articles constituting loading for the boats trading on the Ohio and Mississippi, are; flour, whiskey, apples, cider, peach and apple brandy, iron and castings, tin and copper wares, glass, cabinet work, windsor chairs, mill stones, grind stones, nails, &c. &c. And the principal articles brought up the Ohio in keel boats, are, cotton, lead, furs and peltry, and sometimes hemp and tobacco from Kentucky.—This traffic is carried on briskly at this time, and no doubt a few years will greatly increase it, and much to the advantage of the adventurers.

Exclusive of the trading boats, there are many loaded altogether with merchandize of foreign importation, destined to Kentucky, Tennessee, Ohio and the Territories. Many others are family boats, seeking places of settlement in these new countries, where their posterity may rest in safety, having plenty of all the necessaries, and many of the luxuries of life, where their children's children may enjoy the rich and prolific productions of the land, with-

out an over degree of toil or labour, where the climate is mild and the air salubrious,* where each man is a prince in his own kingdom, and may without molestation, enjoy the frugal fare of his humble cot; where the clashing and terrific sounds of war are not heard; where tyrants that desolate the earth dwell not; where man, simple man, is left to the guidance of his own will, subject only to laws of his own making, fraught with mildness, operating equally just on all, and by all protected and willingly obeyed.

The hills on both sides of the Ohio, as low as Grave creek, below Wheeling, are filled with excellent coal.† Below this, coal grows scarce, and what is found, is not of so good a quality. Coal has been boated down from Grave creek to Marietta and Limestone, where it sold for 25 cents per bushel. Even at this high price, it is not a very advantageous article of trade. The hills of the Allegheny and Monongahela rivers, are also filled with good coal mines up to their head waters; and in some places valuable ores are found in them.

The lands of the Ohio, and its branches, are differently timbered according to their quality and situation. The high and dry lands are covered with red, white and black oak, hickory, walnut, red and white mulberry, ash, poplar, dogwood, some yellow pine, cucumber tree, sasafras, chesnut, and patches of grape vines are sometimes to be found on the south side of the hills. The low and bottom lands

* The following observations on the soil and climate are taken from the Journal of a col. Gordon, who passed down the Ohio as early as 1760.—"The country on the Ohio, &c. is every where pleasant, with large level spots of rich land, remarkably healthy. One general remark of this nature may serve for the whole tract of the globe, comprehended between the western skirts of the Allegheny mountains, beginning at Fort Ligonier, thence bearing southwesterly to the distance of 500 miles opposite to the Ohio falls, then crossing them northerly to the heads of the rivers that empty themselves into the Ohio; then east along the ridge that separates the Lakes and Ohio streams to French-creek, which is opposite to the above mentioned Fort Ligonier, northerly—This country, may, from a proper knowledge, be affirmed to be the most healthy, the most pleasant, the most commodious, and most fertile spot of earth, known to European people." *Hutchins.*

† A coal mine was opened in the year 1760, opposite to Fort Pitt on the Monongahela, for the use of that garrison. *ibid.*

produce button wood or sycamore, butter-nut, tulip tree, papaw, black willow, locust, honey-locust, buckeye, cherry, mulberry, beech, elm, aspen, maple or sugar-tree, plumb tree, hickory, walnut, grape vine, remarkably large, spice wood, black alder, &c. And below or southwardly of the Falls, are several cedar and cypress swamps, where the cedar and cypress trees grow remarkably large, and where also are great abundance of canes, such as grow in South Carolina, and on the Mississippi.

Instructions and precautions, necessary to be attended to by strangers and others about descending the Ohio river.

THE first thing to be attended to by emigrants or traders wanting to descend the river, is to procure a boat, to be ready so as to take advantage of the times of flood, and to be careful that the boat be a good one: For many of the accidents that happen in navigating the Ohio, are owing to the unpardonable carelessness or penuriousness of the boat builders, who will frequently slight their work, or make their boats of injured plank;* in either case, putting the lives and properties of a great many people at manifest hazard. This egregious piece of misconduct, should long before this time have been rectified, by the appointment of boat-inspectors at the different places, where boats are built. But as this has never been done, it behoves every

* We were in hopes that these observations were no longer necessary, but a recent circumstance proves their truth and applicability: Some time in the last of October or beginning of November, 1807, a Mr. Winchester's boat struck a rock a few miles below Pittsburgh, and one of the bottom plank being stove in, the boat sunk immediately; and the loading, consisting of dry goods, was materially injured, to the amount of several thousand dollars. The proprietor not being with the boat at the time, immediately, on his hearing of the accident, conceived that it must have arisen from the carelessness of the person to whom he had entrusted the care of the boat and cargo; and in consequence, brought suit against the man for damages. The man however to prove his innocence, produced before the justice of the peace, (Doctor Richardson, of Pittsburgh,) the broken plank, which proved to be rotten in the part where it was broken; and the justice discharged him as not being culpable for damages in this case.

purchaser of a Kentucky boat, which is the sort here alluded to, to get it narrowly examined before the embarkation, by persons who are well acquainted with the strength and form of a boat suitable for a voyage of this kind.

The principal places where families and merchants stop to prepare for embarkation, are Brownsville, (or Redstone) Pittsburgh, and Wheeling. There are people in each of those places that make it their business to accommodate strangers descending the river with every article they may want, either in provisions, farming utensils, boats, or other crafts, &c. at a cheap and reasonable price. There are large boat yards at each of these places, and their boats are generally well made and strong, the price of which varies according to their make, length, and strength; one convenient for a family, between 30 and 40 feet in length, costs from one dollar to one dollar and twenty five cents per foot, making perhaps 35 dollars for a comfortable family boat, well boarded up on the sides, and roofed to within seven or eight feet of the bow; exclusive of this expence, is the price of a cable, pump, and fire place, perhaps ten dollars more. Boats may also be had sometimes at New Geneva, Williamsport, Elizabethtown, and M'Keesport on the Monongahela; and at some places on the Youghiogany river; also at the mouth of Big Beaver, and Charlestown, on the Ohio, and perhaps a few other places. The Allegheny is now beginning to furnish boats, which descend that river in high water loaded with salt, boards, and lumber, and sell at Pittsburgh generally at a reduced price.

The number of embarkations, and their conveniencies, which take place at Brownsville, Pittsburgh, and Wheeling, depend much on the different stages of the water in the different seasons: The first place is about 10 miles the nearest point to the western waters from the eastward; and when the waters will suit, it saves length of road to take water there:—but the waters must be pretty well up to make embarkation safe at Brownsville; therefore stopping there when the waters are really low, is attended with much loss of time, and of course, expence.—Boats can go from Pittsburgh at a much lower stage of the water than they can from Brownsville; yet there are periods, and these generally happen from about the middle of July until the be-

ginning of October, when embarkation at either place would be attended with considerable detention. Wheeling, therefore, is the safest point to strike at in very low stages of the water, and from thence boats may go at all seasons of the year. It is about 58 miles by land from Brownsville. Pittsburgh is preferred as a place of embarkation to Wheeling, when boats can descend from it, for two reasons: first, it is about 45 miles nearer to Philadelphia or Baltimore; and secondly, merchants and travellers say they are better accommodated here with storage for their goods, and all other conveniences which they may stand in need of, than they could be at Wheeling; therefore, they seldom go there, except in cases of very low water, embarking either at Brownsville or Pittsburgh. But families wishing to cross the Ohio, with their waggons, generally cross at Wheeling, Charlestown, Georgetown, and Big Beaver, according to the direction of the country they are about to remove to. Those destined to the country N. W. of the Allegheny river, and on lake Erie, and bordering the boundary between Pennsylvania and Ohio, generally cross the Allegheny at Pittsburgh.

The best seasons for navigating the Ohio, are in spring and autumn. The spring season commences at the breaking up of the ice, which generally happens about the middle of February, and continues good for about three months and sometimes four. The fall season generally commences in October, and continues good until about the first of December, and sometimes all through that month; when the ice begins to form and the river close. But the seasons of high water can scarcely be called periodical, as they vary considerably, according to the wetness or dryness of the season, or earliness or lateness of the setting in, or breaking up of winter.

But freshes in the rivers are not entirely confined to the spring and fall; heavy rains frequently happen, during the summer months, in the mountains, and at the sources of the Allegheny and Monongahela rivers, which give a sufficiency of water to render the navigation of the Ohio perfectly eligible. Those freshes however are not to be depended on, and when they occur, must be taken immediate advantage of, as the waters subside rapidly.

When provided with a good boat, and strong cable of at least 40 feet long, there is little danger in descending

the Ohio in high freshes, when proper care is taken, unless at such times as when the river is full of floating ice. In this case it is safest to permit your boat to have pretty much her own way, as rowing may tend to throw you out of the current or on the points of islands, before you are aware of it; in which case nothing but presence of mind and great exertions will save you. Therefore prevent yourself being caught on the river among floating ice if possible, unless indeed, when it is very thin and thawing very fast; and even in this case, it would be better to detain until the river is clear of ice.

As frequent landing is attended with considerable loss of time and some hazard, you should contrive to land as seldom as possible; you need not even lie by at night, provided you trust to the current, and keep a good look out: If you have moon light so much the better. When you come to, the strength of your cable is a great safeguard. A quantity of fuel, and other necessaries should be laid in at once, and every boat ought to have a canoe, or skiff along side, to send on shore, when necessary, or as a relief in case of accident.

Although the labour of navigating the Ohio in times of high water is very inconsiderable to what it is when it is low, when continual rowing is necessary, it is always best to keep a good look out, and be strong handed. The wind will sometimes drive you too near the points of islands, or on projecting parts of the main shore, or into a bend where there is but little current, in either case considerable exertions are necessary to get you under way again, and keep you clear of danger either on the one side or the other. You will frequently meet with head winds, the river being so very crooked as that which is in your favour one hour, may be directly against you the next; and when contrary winds contend with a strong current, it is attended with considerable inconvenience, and requires careful and circumspect management, or you may be driven on shore in spite of all your efforts. One favourable circumstance is that the wind commonly abates about sunset, particularly in summer.

Boats, have frequently passed from Pittsburgh to the mouth of the Ohio in 15 days in high water; but in general, 10 days to the falls is reckoned a quick passage; but sometimes a boat will be two weeks in going to Limestone, and in a very low state of the water, 20 days.

One other precaution perhaps is necessary in case you are on the river in time of ice, which above all other seasons is certainly the most perilous :—If at any time you are obliged to bring to on account of ice, great circumspection should be used in the choice of a place to lie in.—There are many places where the shore projecting to a point, throws off the cakes of ice towards the middle of the river, and forms a kind of harbour below. By bringing to in such a situation, and fixing your canoe above the boat, with one end strongly tied to the shore, and the other out in the stream sloping downwards, so as to drive off the cakes of ice, which would otherwise accumulate, and tend to sink or drive your boat from her moorings, you may lie with a tolerable degree of safety.

This is a much better way than that of felling a tree above the boat so as to fall partly into the river ; for if the tree does not strongly adhere to the stump, ten to one but the masses of ice carry it down against your boat, and put you in imminent danger, much worse than if the precaution had not been taken.

The reflection here naturally occurs, how easy it would be, and how trifling the expence, in different places on the river where boats are accustomed to land, to project a sort of pier into the river, inclining downwards, which would at all times ensure a safe mooring below. The expences of such erections would soon be repaid by the place becoming famous for a safe and convenient stopping place for boats.

The best mode perhaps in descending the Ohio, in time of low water, is in keel boats. These seem to be more at immediate command in navigating the river ; and as they are always strongly manned, they go with greater expedition. They draw little water and require but a narrow channel. Merchants are beginning to prefer this method for safety and expedition ; and instead of purchasing boats and taking charge of them themselves, they get their goods freighted down from Pittsburgh in keel boats by the persons who make them, and who make it their business to be prepared, with good boats and experienced hands, for such engagements.

This method is the safest, if not the cheapest, for this special reason : the cargo is consigned to the care of an experienced and careful man, who perhaps descends and

ascends the river twice or thrice in the course of one season, and of course must be well acquainted with all the difficulties in navigating it.—On the contrary, when merchants are young, and inexperienced, they do not, often enough, as the Scotch phrase goes, "*Look before they loup.*" They being flushed with the idea of a fortune before them, hastily buy a boat, load, jump into it themselves, fly to the steering oar, and halloo to the hands to *pull out*.—Now swimming in good water, and unapprehensive of the bad, they think themselves safe, until alarmed by the rumbling of the boat on a ripple, or shoving herself into the mud on a sand-bar.—And until now they believed themselves, from having gone down the river once or twice, to have been master navigators, and capable of conducting a ship of 400 tons with equal ease and safety as a common Indian canoe.—Such are the mistaken calculations of the extent of our own knowledge, and abilities.—And in common life, it does not unfrequently happen, that we run our ship aground, when we think she has most water to ride in.

As the trimming your boat, that is, loading her in such a manner as to draw an equal depth of water all around, is of considerable consequence to her safety, you ought to be careful to have it done before departure with a circumspect eye. For though the construction of our boats does not render them liable to overset, yet when loaded irregularly, and one corner sunken more than another, a stroke on a rock, or a log, on the diagonal corner, subjects her to fill in that quarter much sooner than if properly trimmed.

There is another precaution which ought not to be neglected; that is, to see that your boat is kept afloat while loading, and when you bring to over night; for if the cable corner should rest on the shore, and during the night, the river should fall much, ten to one but before morning your boat would be filled with water. From a neglect of this kind I have seen a valuable cargo of dry goods sunk and much injured, before the boat was completely loaded.

The caulking of a boat ought to be well attended to before embarkation; for if she has been long built, her timbers and plank may have shrunk, and the caulking got loose. Boats are seldom caulked above the gunnel joint. I think this a great error, and an unsafe finishing. The next joint

at least ought to be well caulked all around. And for fear of accident, it would be well that every boat was furnished with a few pounds of oakum, together with a mallet and caulking iron. These precautionary provisions might sometimes be the means of saving in part, if not in whole, a loading worth many thousand dollars. For the greater part of the accidents that happen on the Ohio, arise from a want of a proper knowledge of the means that ought to be taken to prevent them.—Some indeed, possessing the knowledge, unpardonably neglect their duty, until sad experience puts them in mind of it, by a loss which perhaps they are little able to bear.

Having given some general and preparatory instructions, which we presume will be found useful if attended to, and a cursory view of the rivers, we now commence the more particular directions how to navigate them. The distances from place to place, except those marked *(M. D.)* not having been ascertained from actual survey, may not in all cases be found absolutely correct, yet it is hoped they will not be found so materially erroneous, as to militate against the utility of the work.

OF THE MONONGAHELA.

ITS CHANNEL, SHOALS, RIPPLES, SAND-BARS, TOWNS, &c.

	MILES.	
CLARKSBURCH, Stands on the E. side of the river, 40 miles S. E. of Morgantown, is the chief town of Harrison Co. Virginia, and contains about 50 houses, a court house and jail. From this to Morgantown the navigation of the river is very difficult in low water, and can be gone only in small crafts.		
MORGANTOWN, Is situated on the E. side of the river, the capital of Monongalia Co. Virginia, contains about 60 dwellings, a court house and stone jail. It is 303 miles from Philadelphia, and above 63 by land above Pittsburgh.	40	40
Boundary between Penn. and Virgin.	4	44
Cheat river enters on the East side, Four miles below the boundary between Pennsylvania and Virginia. At the mouth of this river is a long and ugly shoal and the channel somewhat difficult. Here a person can be got to pilot you past the danger.	4	48

This river rises in Randolph Co. Virginia, on the N. W. side of the Allegheny mountains, is about 200 yards wide at its mouth, and has some valuable mills and iron works on it. Dunkard's settlement is 50 miles up it, to which it is navigable for small crafts. There is a portage of 37 miles from Cheat to the Potomack at the mouth of Savage river.

Dunkard's Creek, west or left side,	2	59
Here is a shoal but not very difficult.		
George's Creek, East or right hand side,	10	60
Just below the mouth of this creek lies		

NEW GENEVA,

A small village, having in its vicinity a valuable factory of glass, erected by Albert Gallatin Esq. Secretary of the U. S. treasury, and now conducted by Mr. Nicholson his partner. This town is in Fayette Co. 14 miles S. W. of Uniontown, and a little below it on the opposite side of the river, stands

GREENSBURGH,

A small village in Greene Co. PA.

Big Whitely Creek, left hand side.	4	64
Little Whitely, same side.	2	66
Channel near the middle of the river.		
Brown's run E. side, ch. middle of the river.	2	68
Middle run E. side, ch. near the W. shore.	2	70
Cat's run, ch. middle of the river.	2	72
Muddy Creek, West side,	4	76
Here are two old fish dams, the channel of the first is near the middle, and of the other near the East side.		
Ten mile Creek, west side,	7	83
Channel, a chute in the middle of the river. On this creek are iron works, grist and saw mills, and it runs through a well settled country of rich farmers, principally from New Jersey.		
FREDERICKTOWN.	1	84

This is a small village; stands on the West side of the river, Washington Co. Pa. contains two Mercantile stores, and a public library, instituted principally by Quakers.—Within a few miles is a large brewery and distillery, and tanyard.

"About a mile below Fredericktown is a curious cave called the *Panthers Den*.—It enters the hill about half way from its base, by a small fracture or rent in the rock.—After going a few yards through a narrow and descending passage, you enter a wide but low room, in which you can walk nearly upright—To the roof of this room we found bats hanging in a stupid kind of sleep—The next room we got into by clambering up another fracture in the rock—this room we had to roll ourselves

through, and entered a third by a narrow and descending passage occasioned by another rent in the rock.—This room was extensive, and high enough to walk upright in, and was nicely divided by a partition of petrifactions, formed by the drippings of the water through the roof.—The formation of these petrifactions, had a singular appearance, something similar in shape to two hay-stacks with their conic tops put one on top of the other.—We had gone crouching, pushing, and rolling ourselves through this fractured hill about 40 yards—feeling tired we returned with candles and cord to the mouth again in safety.—The first room had sufficient marks of animals bones to entitle it to the name it bears."

James Crawford's ripple, 1 35

Channel near the middle of the river.

Josiah Crawford's ripple, 3 88

Channel near the middle of the river.

Dunlap's Creek, East or right hand side, 3 91

Here has been a fish dam—the chute is near the middle of the river. Immediately above the mouth of this creek stands BRIDGEPORT, a small village, divided from Brownsville by a bridge over the creek. In it are several mercantile stores, an earthen pottery, tan-yard, a wire weaver, card maker, hatters, a boat yard, and a market house. It contains 56 dwellings.

BROWNSVILLE, (or REDSTONE,)

Lies immediately below Dunlap's creek, on the East side of the river, finely situated on a first and high second bank. It contains about 120 houses, principally of wood, some handsomely built with stone and brick; a market house, an Episcopal church, 18 mercantile stores, two tanyards, a rope walk, two boat yards, two tin and copper manufactories, two factories of nails, one printing office, which issues a weekly paper, a post office, a ware house, one scythe and stone maker, blacksmiths, silversmiths, (one of whom makes surveyors compasses,) Taylors, Shoemakers, Saddlers, &c. &c. Within a few miles of the town are four Friends' meeting houses, 26 grist, saw, oil, and fulling mills, and within four miles, up Redstone creek, a valuable paper mill, owned by Jackson and Sharpless. Byrd's fort formerly stood here.

The inhabitants of Brownsville are remarkably industrious, and the settlement around the town, is the oldest and richest in the Western country, and is principally settled by Quakers. This being a place of considerable embarkation, individuals make it their business to supply travellers with boats and all other necessaries for descending the river. It is in Fayette Co. Pa. and 12 miles N. W. from Uniontown, the seat of justice for that county; 33 miles S. E. of Pittsburgh, 290 West

of Philadelphia, and 25 E. of Washington Pa. in N. lat. 39. 58. W. long. 81. 12 1-2.

Near this place are rocks containing curious carvings—the hills abound with excellent coal, the river with fish—and there has been lately erected several wool carding machines in its vicinity.

In digging a cellar lately for a necessary in the town, there was found in a kind of box coffin a human skeleton. The coffin was found standing nearly erect, the boards much decayed; no doubt deposited here during the wars between the Indians and the white people, at the early periods of the first settlement of the country.

Redstone creek, right hand side,	1	92

Channel is near the middle of the river, there being a smart ripple near the mouth of the creek. On this creek are several valuable saw, grist, and oil mills, one paper mill, and a wool carding machine at its mouth.

Pigeon creek, left or west side,	18	110

Channel in the middle of the river.

WILLIAMSPORT,

Situated on the left bank of the river, just below Pigeon creek, is a growing village, in Washington Co. P. 20 miles east of Washington, and about 23 above Pittsburgh.—The inhabitants have been petitioning the legislature for the privilege of forming it into a new County, by taking off a part of Washington, Westmoreland, Fayette, and Allegheny Counties, all of which corner near that place. It is said 4000 dollars have been already subscribed to meet part of the expences of County buildings, &c.

Parkinson's mill, right side,	3	113

Channel in the middle of the river.

M'Farland's ferry,	6	119

ELIZABETHTOWN, 2 121

Is a small village on the right bank of the river, in Allegheny Co. Here is a boat yard, out of which were launched, the "Monongahela Farmer," and the brig "Ann Jean." The town does not thrive much. Original proprietor, Col. Stephen Bayard. It is 18 miles above Pittsburgh.

Peters creek left bank,	3	124

Here is a small ripple, channel near the west or left hand shore.

M'KEESPORT,	5	129

A small and dull village on the right or east bank, just below the mouth of the Youghiogany river, in Allegheny Co. 12 miles above Pittsburgh. Original proprietor, John M'Kee, who laid it out in 1794 Boats may sometimes be procured here. It has a large brewery, two mercantile stores, a tan and boat yard.

The Youghiogany is a considerable river, and affords pretty good navigation, except in very low water, for fifty or sixty miles. Passing S. W. of the Laurel hill, it precipitates itself over the Ohiopyle falls, 20 feet perpendicular. It passes through a part of Westmoreland, Fayette and Allegheny Counties, and where it discharges itself into the Monongahela, it is about 150 yards broad.—Jacob's creek, on which are Turnbull and Marmie's Iron works, enters the Yough about 35 miles above Pittsburgh.

Turtle creek,	5	134

A town was laid out above the mouth of this creek a few years ago—but it has not progressed. Just at the mouth of this creek is a long and difficult ripple.—Channel, at the head of the ripple, near the right side for a short distance, thence about the middle of the ripple it runs to the left shore, and returns to the right shore near the foot of the ripple.

Braddock's fields, right bank,	3	137

Here is a ripple, channel right side.

These fields are rendered famous on account of Gen. Braddock's getting defeated here in an engagement with the French and Indians, in the year 1758. Braddock's army was cut all to pieces in a short time; the Indians and French being completely covered by woods, grass, &c. while the English army stood in an open road thick set with grass to receive the continual firing of the enemy, whom they could not even see. Braddock* was mortally wounded, and the late General Washington, then acting volunteer aid de camp under him, was the only aid de camp left alive and not wounded on the field of battle, and he had two horses shot under him, and four bullets passed through his coat.†

These fields are 9 miles above Pittsburgh, and the owner‡ frequently ploughs up the bones of those who fell in this dreadful carnage.—It is said that a valuable brass piece may sometimes be seen in a very deep hole in the river opposite the field of battle; and the trees on the side of the hill still bear the marks of the balls fired during the engagement.—Braddock's fields are also celebrated on account of their having been a place of general rendezvous for the Whisky Boys, as they were called, during the Western Insurrection, in the year 1794.

Nine mile run, (M'Dowel's,)	1	138
Gordon's (now Barns's) ferry,	2	140

Channel in the middle of the river.

Four mile bar, mouth of four mile run,	3	143

* He was conveyed to Dunbar's camp near Uniontown, where he died.

† Ramsay's life of Washington. ‡ Geo. Wallace, esq.

Channel on the right hand side of the river, which from this place, ought to be kept down to

PITTSBURGH, 4 147

Opposite to this town is a sand bar three quarters of a mile long, nearest the S. or left hand side; it sometimes remains bare for three months; it was ploughed, and sowed with buckwheat in the year 1801-2; the grain flowered, but the floods came and swept the crop away before it had time to mature.—The channel is on the town side.

OF THE ALLEGHENY.

ITS CHANNEL, RIPPLES, ISLANDS, TOWNS, &c.

INCLUDING THE PORTAGE FROM
ERIE (OR PRESQU' ISLE.)

THIS town is handsomely situated on the south bank of Lake Erie, opposite the Peninsula, which runs several miles into the lake, forming between it and the town, a handsome harbour for vessels, though it is somewhat difficult to enter. Erie was laid out a few years since (in 1797-8, I think,) by the State of Pennsylvania, and from its commanding situation must in time become a place of considerable business. It is increasing in buildings and business, is the seat of justice for Erie Co. in lat. N. 41. 40. about 120 miles N. of Pittsburgh. The old fort, just below the town, which contains the venerable remains of the late General Anthony Wayne, (who died here, Dec. 14, 1796, on his return from his campaign against the Indians,) is totally evacuated. The country in its vicinity is settling rapidly; and the trade in salt, of which there are about 7000 or 8000 barrels enter that port annually, is encreasing. The convenience of the turnpike road now erecting between Erie and Waterford, a portage of fifteen miles, will be very considerable when completed.

Erie has a post office, several mercantile stores, and public inns, and a number of the mechanical branches are carried on with spirit. The town is well supplied with fish from the lake, and cranberries from the Peninsula, of which many barrels are sold at the Pittsburgh market yearly. The advantage that Erie has from the trade of Detroit, and the northern lakes, with that of the St. Laurence and the Mohawk rivers,

added to the easy communications to it from different points of the Ohio, are certainly very great, and must eventually add importance to the place, and riches to the country around it.

WATERFORD (FORT LE BŒUF,)	15	15

This town is situated on the N. side of French creek, and is the nearest and best point of communication between that creek and Erie; and it is here where goods are deposited to be ready for transportation either over the portage, or down the creek. A frontier post* was kept here till the peace with the Indians in 1796. It is now destroyed. It has a post office, several mercantile stores, warehouses, public inns, &c. and is 15 miles S. of Erie, in Erie County.

French creek through Le Bœuf lake,	4	19
Muddy creek,	12	31
Dead water, end of,	14	45
MEADVILLE,	18	63

This town stands on the E. or left hand side of French creek, is the seat of justice for Crawford Co. P. has several mercantile stores, public inns, a post and printing office which issues a weekly paper, and from its central situation in the heart of a rich and fertile country, it will no doubt become a place of considerable business. It has a well regulated school, a fixed preacher, and a society for the encouragement of home manufactures. It is about 86 miles north of Pittsburgh.

Wilson's Bend,	6	69
Little Sugar creek,	3	77
Big Sugar creek,	12	89

From this creek there is a considerable rapid down to

FRANKLIN,	4	93

This is the seat of justice for Venango Co. P. situated on the right or W. side of French creek, a little above

* The French had a fort erected here as early as 1751. The English growing jealous of their encroachments on the Ohio, and in order to check their further progress, Mr. Dinwiddie, then colonial governor of Virginia, dispatched the late General George Washington, then in the nineteenth year of his age, with a letter of remonstrance to the French commandant, Mons. Le Gardeur De St. Pierre, then at that garrison. On this embassy, Washington set out from Will's creek, now called Fort Cumberland on the Potomack, on the 15th November, 1753. Having delivered his letters, he returned to Williamsburgh, in Virginia, on the 78th day after his departure, a route at that period at once hazardous and fatiguing in the extreme. *Ramsay's life of Washington.*

the junction of it with the Allegheny river. It is bounded by large and stony hills on both sides. It progresses but slowly, and the country around is but thinly settled. The French formerly kept a garrison here, which is now destroyed, but is said to have a brass piece of ordnance of considerable value buried in its ruins.—It is about 63 miles northward of Pittsburgh.

Sandy creek, west side,	10	103
Scrub grass creek, west side,	8	111
Falling Springs,	3	114
Montgomery falls,	4	118

Channel on the left hand side of a large rock in the middle of the river.

Ewalt's defeat,	3	121

This is a very rocky place, channel east side.

Patterson's falls,	4	125
Nicholson's Eddy,	2	127

Here is a strong ripple, channel West side.

Stump creek, east side, channel west side.	8	135
Parker's or Amberson's falls,	3	138

Channel on the east or left side.

Catfish falls, channel east side,	8	146
Redbank creek, channel east side,	7	153
Cumming's rock, channel west side,	5	158
Mahoning creek, east side, chan. west side.	2	160
Slone's ferry,	14	174
Crooked creek, east side	4	178
Nicholson's falls, channel west side,	3	181
KITTANNING,	7	188

Is a small but thriving village, situated on the east bank of the Allegheny, where the Kiskeminetas joins it;—is the seat of justice for Armstrong Co P. about 36 miles N E of Pittsburgh.

FREEPORT,

A small village, lies on the opposite side of the river, at the mouth of buffaloe creek

Owing's island, channel west side,	4	192
Bull creek, west side, channel east side.	3	195
Logan's ferry, mouth of Puckety creek,	4	199

Channel on the east side

Hullard's island, channel east side,	4	203
Plumb creek,	3	206
Sandy creek east side,	2	208

Here is an island, channel east side

Pine creek, west side,	5	213
Wilson's island, channel east or left side,	4	217

PITTSBURGH, Here you may land below the wharf on the Allegheny, or turning the Point, ascend the Monongahela, and land at any of its wharves. The shores of either river are dry and gravelly, but in high water the Monongahela affords, from the gentleness of its current, the safest harbour, and is the most convenient to the centre of the town.	1	218

THE OHIO.

WE now commence the directions for navigating the Ohio river, and as it commences at Pittsburgh, it will not be amiss to preface the more particular account of it, by a short description of that place.

PITTSBURGH,

IS delightfully situated at the head of the Ohio river, on the plain or point of land formed by the junction of the Allegheny and Monongahela rivers; the former running from the Northeast, and the latter from the Southwest, making an angle where they unite of about 33 degrees. On the point stood the old French garrison known by the name of Fort Du Quesne, which was evacuated and blown up by the French in the campaign of the British under general Forbes‡ in 1758. The appearance of the ditch and mound, with its salient angles and bastions are still to be seen.

On the margin of the Allegheny and near to the old fort once stood a row of houses, tolerably elegant and neat, but have been swept away in the course of time, some by the encroachments of the floods, and others were torn down for the purpose of forming an opening to the river from the garrison. Not a trace of those buildings now remain, except some of the stones used in their founda-

‡ This campaign might be said to have been conducted by our late general George Washington. For he was foremost in the expedition, though but in his 26th year—and it was he who pointed out the necessity, and urged the reduction of this fort, as the only safeguard to the frontiers of Virginia, from the repeated and murderous incursions of the French and Indians.

Ramsey's Life of Washington.

tion, which may yet be seen jutting out of the bank as the earth caves into the river.—" Those who 40 years ago, saw them flourish, can only say here they stood."

There stood at the point, as late as 1784, a large umbrageous tree—its fate too has been unfortunate—the floods undermined the ground and it was swept away.

On part of this ground now stands a large brewery, and two dwellings; the situation is too low indeed for a general building, and the bank too subject to cavings.—Just above Fort Du Quesne, is the remains of the garrison built by general Stanwix, called Fort Pitt, after the late Earl of Chatham, and is said to have cost the British nation 60,000 *L.* Sterling, about $ 266,666. 66. The bricks which composed the walls of this garrison, have been applied to building houses, which are distinguishable from the rest of the brick houses in town by the whiteness of the colour impressed on them by the strength of the lime and cement used in their first application.

Within the embankment are still some of its barracks and a strong stone powder magazine, the only remains of the British buildings; there are also a few dwellings built within three or four years.—The British officers, commanding this garrison, had, on the bank of the Allegheny, most elegant gardens, called the King's and Artillery gardens; near to these they planted an orchard of excellent bearing apple trees, some of which still bear fruit, others have been swept away by the surly floods of the river, and others cut down to give room for building.

Fort Pitt, being included in one of the manors of the Penn family, was sold by the proprietaries, and now makes a part of the town of Pittsburgh, though its banks and ditches form a considerable obstruction to its being regularly built on, and very much spoil the beauty of the view from the head of Liberty and Penn streets to the Monongahela river.

Fort Fayette, the present garrison, built in the year 1792, is also within the borough, and stands on the Allegheny river. It answers as a place of deposit, and for the convenience of stationing soldiers destined down the Ohio, and Mississippi; as a place of defence it is useless.

In the year 1760, a small town, called Pittsburgh, was built near Fort Pitt, and about 200 families resided in it;

but upon the Indian war breaking out in May 1763, they abandoned their houses and retired into the Fort‡.

The bottom or plain on which Pittsburgh stands, would seem, from circumstances to have been *made ground*, and the Allegheny river to have once washed the base of Grant's hill* ; but through time and accident, found its way by small progressions, from that hill to its present bed. There are two rises, or what are called *first* and *second banks*, running parallel with that river, which would seem to have once formed its Eastern margin. These elevations make beautiful situations for either gardens or buildings.—In digging wells in the town, the various kinds of sand and gravel are found as appear on the beaches and in the beds of the rivers ; pieces of wood and strata of dirt and leaves are also frequently discovered eight or ten feet below the surface. The Allegheny is now working itself back again. It has washed away about 50 or 60 feet of ground on its eastern bank within 30 years.

This plain which is of a rich sandy loam, is about half a

‡ Hutchins's Topographical Description of Pennsylvania, &c.

* *Grant's* hill comes to a handsome point within the limits of the borough, eastward of the town. From it you have a beautiful view of the town and the three rivers. On its summit is a mound or ancient burying place of the Indians, which is now enclosed in the middle of a fine garden, and has an elegant summer house on the top of it.—This seat which is among the handsomest of the place, formerly belonged to, and was first improved by Mr. Marie, a French gentleman. He sold it to James Ross, Esq. its present proprietor.—This hill takes its name from general Grant who met with a defeat here by the Indians and French, in the war which ended in 1763.—Grant thinking his conquest sure, imprudently beat the *reveille* to the French garrison at sunrise.—But before he was aware of it, the garrison, dividing itself into two parties, cautiously sallied out under the bank of the two rivers, and joining on the back of Grant, came down upon him like a torrent, took Grant himself prisoner, and cut and tomahawked his troops, which consisted of 800 Caledonians, or Highland Scotch, all to pieces in a few minutes. The hill was then covered with wood and thick bushes, which added to the confusion of Grant, and to his easy defeat, he not being accustomed to fight in the *Indian fashion*, that is, behind trees, old logs, rocks, &c.—It was the ignorance of this method of fighting, that occasioned the sudden defeat, and dreadful carnage of the troops of General Braddock.

mile in width from the Allegheny to the point of Grant's hill, its widest part; thence up that river it gets narrower, until about four miles, where the hill closes to the river bank. But the town may extend as far as the Two Mile run; the bottom that distance is spacious, and well calculated for building on. It is now enclosed in orchards, meadows and grain fields, and produces fine crops of each.

The present town of Pittsburgh was first laid out in the year 1765; it was afterwards laid and surveyed in May, 1784, by Col. George Woods, by order of Tench Francis, Esq. Attorney for John Penn, Jun. and John Penn. The beauty and very commanding situation of the place has increased its buildings, population and business, beyond all calculations. It now contains about 500 dwellings, the greater number perhaps wood, some stone, and many elegantly built with brick, two and three stories high. The public buildings, are: A large and spacious court house handsomely built with brick; a large brick market house; these are placed in the public square having market street running between them: a stone jail; a bank, established here January 1, 1804, being a branch of the Pennsylvania bank, also of stone; a large stone house on the bank of the Monongahela, four stories high, built by the Evans's of Philadelphia, for a steam grist and paper mill, not yet in motion; a handsome octagon Episcopal church; a handsome and spacious Presbyterian church; a Covenanter's, German Lutheran, and a Roman Catholic church, and an academy, all of brick; a large and convenient frame ware-house, for the storage of goods at the end of Wood street, on the bank of the Monongahela, built and owned by Mr. Thomas Cromwell.

It is highly probable that Pittsburgh will become, from the many advantages which nature has placed within the grasp of its inhabitants, added to those which may arise from the addition of art, one of the most considerable inland manufacturing towns in the United States. Indeed we can draw at this time a tolerable good picture of our future eminence by a view of the present state, and number of our manufactories, artists and mechanicks, each pursuing his business in a manner perhaps unparalleled, for vigilance, ingenuity and industry. The following statement of the number of master workmen in each particular branch, with the manufactories, was taken in the fall

of 1807 : 1 cotton manufactory*, having a mule of 120 threads, and one spinning Jenny of 40 threads, 4 looms, and a wool carding machine under the same roof; 1 glass works†, on the opposite side of the Monongahela, for green, and one on this side, for white glass‡; 2 breweries, 1 air furnace§, 4 nail factories, one of which makes 100 tons of cut and hammered nails annually ; 7 coppersmiths, tinplate workers, and japanners ; 1 wire weaving and riddle factory‖ ; 1 brass foundery, 6 saddlers and harness makers, 2 gunsmiths, 2 tobacconists, 1 bellmaker, 3 tallow chandlers, 1 brush maker, 1 trunk maker, 5 coopers, 13 weavers, 10 blue dyers, 1 comb maker, 7 cabinet makers, 1 turner, 6 bakers, 8 butchers, 2 barbers, 6 hatters, 4 physicians, 2 potteries of earthen ware, 3 straw bonnet makers, 4 plane makers, 6 milliners, 12 mantua makers, 1 stocking weaver, 2 book-binders, 4 house and sign painters, 2 portrait painters, 1 mattress maker, 3 wheelwrights, 5 watch and clock makers and silversmiths, 5 bricklayers, 5 plasterers, 3 stone cutters, 8 boat, barge, and ship builders, 1 pump maker, 1 looking glass maker, 1 lock maker, 7 tan yards, 2 rope walks, 1 spinning wheel maker, 17 blacksmiths, 1 machinist and whitesmith, 1 cutler and tool maker, 32 house carpenters and joiners, 21 boot and shoe makers or cordwainers, 5 windsor chair makers, 13 taylors, 1 breeches maker and skin dresser, 12 school masters, 4 school mistresses, 33 taverns or public inns, 51 mercantile stores, 4 printing offices, 6 brickyards, 3 stone masons, 2 bookstores, 4 lumber yards, 1 maker of machinery for cotton and wool manufactories¶, one factory‖‖ for clay smoking pipes, 1 indifferent copperplate printing press. There are other branches of business sometimes entered into as a temporary employment, but not being permanent I have not included them.

What adds much to the surety and safety of Pittsburgh becoming a residence for strangers, is the cheapness of its market, which is abundantly supplied with all the necessaries of life, from a rich and fertile country in its vicinity. Beef, well fatted, sells from 2½ to 4 cents a pound ; flour from $ 1 75 to $ 2 50 per hundred weight, or from $ 3 50 to $ 4 50 per barrel ; corn 33, potatoes 40, and turnips 18 cents, per bushel ; cabbage 4 cents a head ; butter from 10 to 18 cents per pound ; fowls 10, ducks

* Kerwin. † O'Hara. ‡ Robinson and Ensell. § M'Clurg. ‖ Wickersham. ¶ Eltonhead. ‖‖ Price.

25, geese 33, and turkies from 40 to 75 cents, each ; venison 3, pork 3½, hogs lard 8, mutton 4, veal 3, and cheese from 8 to 12 cents, per pound ; eggs 10 cents a dozen ; onions 1 dollar, Indian meal 40 cents, and soup beans 1 dollar per bushel ; bacon from 6 to 10 cents per pound ; whiskey 40 cents per gallon, cider from 3 to 4 dollars per barrel, peach brandy 80 cents per gallon, beer 5 dollars a barrel ; 700 country linen 40 cents, and tow do. 33 cents per yard ; dried apples and peaches 1 dollar per bushel, green do. 40 cents ; salt 2½ dollars per bushel ; fresh fish 3 and 4 cents a pound ; country sugar from 10 to 12 cents a pound ; and many other articles with which our market house is filled equally cheap.—These are about the average prices of our market throughout the year.

I have seen English gentlemen very pleasantly surprised after reading the above rates of our market. " What! said one to me, (after learning that a mechanick could earn a dollar a day for his labour,) can a man earn as much in one day as will buy him *thirty pounds of beef!*—In London, continued he, we pay *a shilling a pound for beef*, and a man's wages are considered high at *half a crown a day*, and others get but *a shilling*.—No wonder that you are an independent and happy people—no wonder that people from all nations are flocking to your hospitable shores—and it is no wonder that your government is admired by all men of sense and reflection throughout Europe—but, continued he, in a reverie, their tongues are tied—their bodies and senses manacled.—"

It is the judicious contrast of these things that sounds welcome to the ear of the stranger, and in their effects, are equally beneficial to the pocket of the industrious man.—It is these circumstances, so favourable on all sides, that must push Pittsburgh on to an eminence in arts and manufactures, beyond what may be thought at present an extravagant calculation.

The inhabitants (souls) of this place are about 3,000 in number : they are a mixture of many nations, principally however Americans ; a good many Irish, and some English, some Scotch, some French, Dutch and Swiss, and a few Welch and Italians. To be thus brought together from all quarters, with their various fashions, prejudices and passions, in religion and politics, they are generally friendly to each other, hospitable, and disposed to encourage each in his particular business in proportion to

the appearance of industry and good behaviour. But a few jealousies, likes and dislikes, may reasonably be supposed to exist. These in time however will wear off, and as the interest of all become more united, an open and candid friendship will more readily shew itself, until the whole body politic will become a little brotherhood of faith and confidence.

Talents and education are not deficient in Pittsburgh. The bar and pulpit are well filled. Some of our lawyers are perhaps not excelled by any in the United States, either for eloquence or legal knowledge.—The benefit of well regulated schools, the circulation of public prints, and a public library, form the basis of the minds of the people.—The free use of these, keeps them in the habit of thinking, reflecting, and acting deliberately; and in all public and national concerns, enables them to act as becomes the free citizens of a great and independent nation, with firmness and unanimity.—Theatrical performances are sometimes attended to by the young gentlemen of the place, by way of improvement to themselves, and amusement to the town; not for gain. An Appollonian Society, forms also a school for improvement in instrumental music; while masters are employed for teaching the government of the voice in sacred harmony.

On the other hand, the education of young ladies is by no means neglected: their minds are early impressed with the habit of industry, at the same time they are engaged in learning the use of their needle, pencil, music and dancing; having already acquired the more useful branches of education, reading, writing, arithmetic, grammar, geography, and letter writing.

Pittsburgh is the seat of justice for Allegheny co. Pa. and has, with justice, been emphatically called the key to the Western Country. It is 300 miles W. by N. of Philadelphia, 252 from Washington city, about 335 from Lexington, K. and about 1100 from New Orleans by land, though 2000 by water. It is in lat. 40.° 35′ N. long. 80.° 38′ W. being about five degrees Westward of Philadelphia. Our climate, though irregular, and subject to many changes in the different seasons, is healthy; any thing like epidemical diseases, fevers, &c. being unknown among us; except those that rage without bounds; such as the *Influenza*, in the summer and fall of 1807, whose contagion, though but in few instances mortal,

flew to all parts of the United States, and perhaps throughout Europe in a trice; place and situation proving to have no effect on its passage, it seems to have been wafted along with the wind and atmosphere of the season, confined in its attacks and effects to neither sex nor age, but as the constitution of those on whom it fell, parried it off with a less or greater degree of force, and success—for like a bold and invidious enemy, its assaults were violent and repeated, attacking frequently the same patient three and four times.

The fogs on the rivers, though sometimes very heavy, prove rather salubrious than otherwise; being the exhalations of the sun during the day, from limpid streams, and the moisture of a fragrant and luxuriant wood.

On entering the town, the stranger is rather offended with its dark and heavy appearance. This arises from the smoke of the coal, which is used as the common fuel; and of which about 170,000 bushels are consumed annually. It costs six cents a bushel at your door, and is said to be equal to any in the world. Our rough hills are filled with it, and our rooms in winter feel the effects of its warmth, and cheerfulness. Wood as an article of fuel costs 2 dollars a cord delivered. The abundance and cheapness of coal, will be peculiarly advantageous to Pittsburgh in her progress in arts and manufactures. Coal Hill, on the south side of the Monongahela, abounds in coal; and a pit in it is said to have taken fire about the year 1765, and continued burning for 8 years; and another pit on Pike run, which burned 10 years. This is a high and steep hill, and its top affords a handsome prospect of the town and rivers below it.

From the immense quantity of coal burnt, there arises a cloud of smoke which hangs over the town in a body, and may be seen at two or three miles distance; when in the town, this cloud of smoke is not discovered, and the place soon becomes familiar to the eye, while the ear is occupied with the mixed sounds of the implements of industry, from 4 o'clock in the morning till 10 at night.

Pittsburgh is a place of general deposit for goods going from the seaports to the Westward. By an act of Congress, it is made *A Port of Clearance*, for all goods, wares, &c.

From the year 1802 to 1805, the following vessels were launched at the ship yards: The ships *Pittsburgh*,

Louisiana, *General Butler*, and *Western Trader*; Brigs *Nanina*, *Dean*, and *Black Walnut*; schooners *Amity*, *Allegheny*, and *Conquest*. The *Monongahela Farmer*, and brig *Ann Jean* were built at Elizabethtown. Misfortunes, and accidents, in getting these vessels down the Ohio, which most probably arose from bad management in the persons entrusted with them, has given a damp to ship building at present. Barges, keels, Kentucky boats &c. are built in great numbers to the amount of about $ 12,000 annually.

OF THE OHIO RIVER.

ITS CHANNEL, RIPPLES, ISLANDS, SAND-BARS, RIVERS, CREEKS, TOWNS, DISTANCES FROM PLACE TO PLACE, &c.

WITH CORRECT MAPS.

ON shoving off at Pittsburgh, if the water be high, your boat requires but little attention; if low, to avoid grounding, you must before you get quite opposite the Point, begin to pull over towards the left shore, going between the end of the Monongahela bar, and one made by the entrance of the Allegheny.

(See MAP 1. page 42.)

No. 1, Hamilton's island, 3

This island is about one mile long, and is now the property and residence of Doctor Brunot, a French gentleman of much taste in agriculture and horticulture, skilled in the practice of physic, and celebrated for his open and general hospitality to strangers and friends.

At the head of this island keep close to the right shore, and after passing the point bear towards the island, and keep close to it all the way down, in order to avoid a sand bar projecting out from the right shore opposite the foot of the island. At the foot of the island, on the left, are large projecting rocks, called "*M'Kee's Rocks.*"

No. 2, Irwin's island, 7 miles long, 4 7

At the head of this island is a sand bar bearing towards the right shore, therefore keep about one third of the breadth of the river to the right, and at the *first ripple* below and opposite Baldwin's mill, leave a big breaker or rock close to the right.—Now bear towards the island to avoid the *Second* or *Horse tail ripple*, about

half way down the island leaving a sand bar to the right and some breakers to the left.

No 3, Hog island is small and just below No. 2, and having a sand bar at its head, you must bear on the right shore, then pull towards the island, passing round its foot close to the left, as if you intended to land at Middletown, a village of six or seven houses on the left bank; being now pretty near the left shore, incline to the right, passing the *Third* or *Woolary's ripple* about two thirds over from the left bank, and half a mile below Hog island.

No 4, Dead Man's island and ripple. 8 | 15

In high water this island is covered—you pass it on the right; the channel is very serpentine. Being in the middle of the river at its head, where there is a ripple, you must pull for the right shore, thence towards the island, then again to the right shore, and again towards the left, which will put you clear of Dead Man's ripple just below the island, where the water is very rough and looks dangerous.

Big Seweekly creek, right side, 2 | 17

Opposite the mouth of this creek is a sand bar, therefore bear on the left shore—Here used to be an old French fishing basket

Loggstown right bank, Indian Loggstown left, *(M. D.*)* 1½ | 18½

Here is a large sand bar running up from the left shore to near the right, and between the head of it and the right shore are large logs; the first you keep to the right, the second and third are opposite each other; these you may go between, inclining, as soon as you are past them, to the middle of the river.

Legionville, or the encampment of General Wayne in the year 1792, is just below Loggstown on the right bank of the river.

No 5. Crow's Island, divided by a gut, 5½ | 24

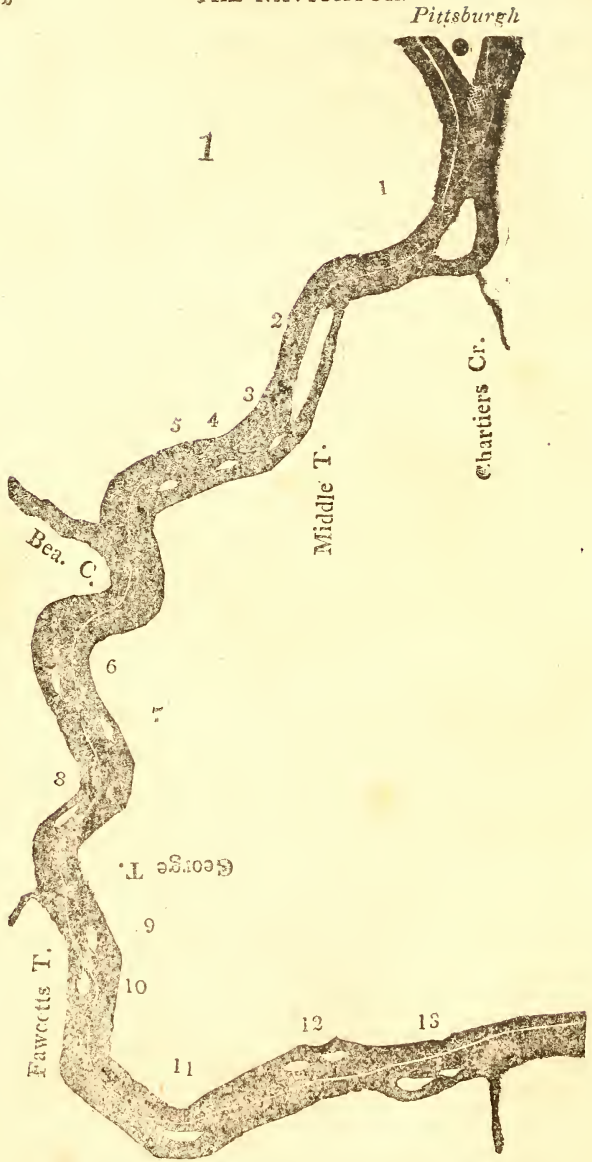
Channel right side close to the island; a sand bar between the island and right shore occasions a break, called *Waller's ripple*; thence to Big Beaver you have deep and gentle water.

Duck run on the left side. 1 | 25

Big Beaver creek, right side, *(M. D.)* 4¼ | 29¼

On approaching this creek you will see some large

* The places marked thus. *(M. D.)* meaning Measured Distance—were accurately measured by Col. Thomas Hutchins, and are taken from his "*Table of Distances between Fort Pitt, and the mouth of the river Ohio.*"


Pittsburgh
1
1
2
3
3
4
5
Chartiers Cr.
Middle T.
Bea. C.
6
7
8
George T.
9
10
Fawcetts T.
11
12
13

rocks on the left shore; when opposite them, pull over for the town and keep about 100 yards from the right shore—if you want to land, you must do it at the ferry houses just below the mouth of the creek, there being no landing place opposite the town.

Beaver creek or river, is a large stream, 60 yards wide at its mouth, affording water enough in swells, for keel boats to Youngstown, thence to Warren, Trumbull co. Ohio, 50 miles by land from its mouth. Goods take water above the falls, 4 miles up. These falls are three miles long and afford excellent seats for mills; there are now on them 4 grist, 2 saw mills, and a forge. A furnace has been lately erected on one of its branches. At Kishkuskes, 16 miles up, Beaver forks into two branches; one interlocks with French creek and Cherage, the other with Muskingum and Cuyahoga; on this branch 35 miles above the forks are several salt springs.

BEAVER, (formerly FORT M'INTOSH,) $\frac{3}{4}$ 30

Is situated about three quarters of a mile below the creek, on a high stony plain, where the old Fort M'Intosh stood, 200 feet above the level of the river. The town was laid out in 1797—8, and probably would have had a fairer prospect of rising to some importance had it been built at the mouth of the creek. One inconvenience at least has arisen from its being where it is; the inhabitants have not been able to get water by pumps, but have been obliged to resort to wooden pipes as conductors to the waters of a spring, at a hill half a mile back of the town. Beaver has about 30 scattered houses in it, a stone jail, a post office, 4 mercantile stores, several public inns, a printing office which issues a weekly paper, and is the seat of justice for Beaver co. P. 30 miles West of Pittsburgh.

About 12 miles North of Beaver is GREERSBURGH, on the head waters of Little Beaver creek, a thriving village. It has a stone academy, post office, and 4 stores.

One mile below the town keep between some large breakers and the left shore.

Racoon creek left side. 2 32

No. 6. First island below Beaver $\frac{1}{2}$ mile long. 4 36

Channel left side, middle of the river.

No. 7. Second island, one mile long. 3 39

Channel right side, pretty close to the right bank, at the head of No 7, is a smart chute.

No. 8, Grape island, half a mile long. 2 41

Channel left side close to the island.

GEORGETOWN $1\frac{1}{2}$ $42\frac{1}{2}$

Is a small village on the left bank just above the mouth of Little Beaver; has two mercantile stores and

a post office, is in Beaver county Pa.—A few yards from the opposite shore, and a little above the town a spring rises from the bottom of the river, producing an oil similar to Seneca oil, which is thought to proceed from a bed of mineral coal in the vicinity of the spring. Channel past Georgetown, is in the middle of the river. | | $\frac{1}{4}$ | $42\frac{3}{4}$

Little Beaver creek, left side, *(M. D.)*

A quarter of a mile below Georgetown. Near the mouth of this creek are two grist, one saw, and a paper mill erected in 1807-8, by Messrs: Coulter, Beaver and Bowman.

Mill creek enters on the right side, a quarter of a mile below Little Beaver; here the state line between Pennsylvania and Virginia on the one side, and Ohio and Pennsylvania on the other, crosses the river, running nearly a North and South direction.

No. 9. Mill creek island one quarter of a mile long, and three quarters below Georgetown.

Channel right side—the first chute is at the upper end of the island; here keep close to the right shore, when half way through, pull for the island, and keep close to it for 150 yards, thence bear a little towards the right shore, but not so much as to prevent you from going to the left of

No. 10, Custard's island $\frac{1}{4}$ of a mile below No 9.

Channel left side, close to the lower point of the island.

FAUCETSTOWN,

Right bank, half a mile below No 10.

No 11, Baker's island, (just above Yellow creek,)

Channel left side, if you take the right channel, keep some ugly rocks to the right.

Yellow creek, right side, *(M. D.)*

Channel close to the left hand shore. | 1 | $\frac{3}{4}$ | $54\frac{1}{2}$

No. 12, Neasley's cluster of islands,

Channel right side. | 2 | $\frac{1}{2}$ | 57

No. 13, Tumbleston's island, (and a little one below it.)

Channel left side, between a snag near the shore and the island. Just below the island to the right is a sand bar, and a little below it to the left is another—there is no difficulty in going between them. | 2 | | 59

Crockton's run and mill, right side, Black horse tavern left side.

Just below is White's tavern, further on are high and broken cliffs on the left, and a little below these, a small creek enters on the left side. | 3 | | 62

King's creek, half mile above No 14.

(See MAP 2. page 46.)

No. 14, Brown's island, 4 66

Channel close to the left shore for about 50 yards, thence towards the island. On the left a steep and high hill presents itself.—Below this island is a ripple, keep close to the left shore.

Willis's creek enters on the right shore, 5 71

Just above the mouth of this creek on a rock under the hill, may be scraped up a fine white salt, especially after a shower of rain and a warm sun. There is also a spot on the same hill where in winter the snows are observed to smoke as if warmed by an internal fire.

Harman's Cr. (Holliday's Cove) left side, 1 72

This is a principal place for the delivery of flour.

STEUBENVILLE, 1 73

Is handsomely situated on an elevated second bank of the river; it is a thriving town, and has 12 mercantile stores, about 100 dwellings, some of them neatly built with brick, a stone jail, a court house of brick now going up, a brick Presbyterian church, a land office, post office, and a printing office issuing a weekly paper. It was laid out in 1798-9 by James Ross, Esq. of Pittsburgh, and Bazil Wells, Esq. of Jefferson county, Ohio, of which it is the seat of justice.—The public inns are numerous, and well accommodated; the citizens are industrious, kind and hospitable to strangers; and with due attention to its prominent interests, Steubenville may rise to importance. It is 38 miles Southwest of Pittsburgh by land.

No. 15, Mingo bottom I. channel right shore, 2 75

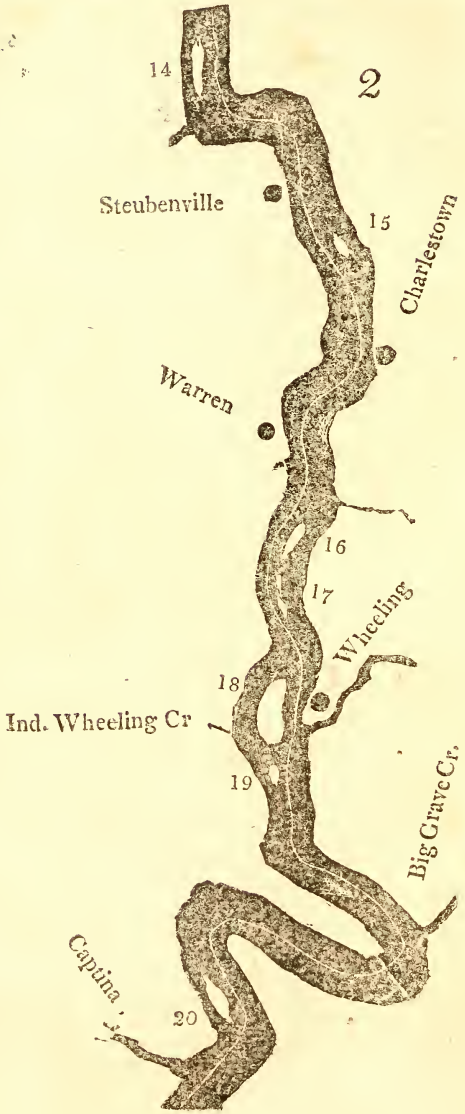
Indian and Virginia Cross creeks, being opposite each other. *(M. D.)* 1¼ 76¼

About one mile and a half above Charlestown, keep pretty close to the right hand shore.

CHARLESTOWN, 2¾ 79

Is situated on the left bank of the river, contains about 80 dwellings, a court house, pillory*, jail, an academy, an extensive pottery of stone and queen's ware, a boat yard, 8 mercantile stores, and a post office. It is the seat of justice for Brooke county Virginia.—This is a good place for embarkation, the navigation being always good except in very low water. In the neighbourhood of Charlestown are a number of valuable

* What a pity that an enlightened people, in an enlightened age, should so far lose sight of the common principles of humanity, as to set before the door, or public seat of justice, such a disgraceful, inhuman, and savage machinery of punishment.


14
2
Steubenville
15
Charlestown
Warren
16
17
Wheeling
18
Ind. Wheeling Cr
19
Big Grave Cr.
Capuina
20

grist mills, which produce some of the best flour sent to the New Orleans market.—Buffaloe creek joins the Ohio at the south end of the town. By land through Washington it is 50 miles Southwest of Pittsburgh.—Channel past the town is near the left shore.

Beach bottom bar, channel right shore. 3 82

Indian Short cr. right side, V. Short cr. left side, 5 87

Just below the mouth of these creeks is a ripple, best channel near the left shore.

WARREN,

A small village of Jefferson county Ohio, stands just above the mouth of Indian Short creek.—Over the mouth of Virginia Short creek, is a bridge and a large ware house at its South end.

No. 16, Pike island, 4 91

No. 17, Twin islands just below No. 16,

Glenn's run empties in just below the Twin islands. In very low water keep No 16, and the lowermost of the Twin islands to the left hand, in good water keep all on the left.

No. 18, Wheeling island, (about 1 mile long.) 5 96

Channel left side—at the upper end of the island keep close to the left shore, until you see the town, thence bear towards the island to avoid logs to the left; after passing the town keep the middle of the river.

At the Northwest side of Wheeling island, Indian Wheeling creek empties in, and at its mouth stands a newly laid out town called CANTON, at present containing 13 houses.

WHEELING

Stands on a high bank of the river, south of the island and nearly opposite its middle. The hill approaches so close on the river that there is room but for one main street running parallel along its bank for half a mile.—The town contains 115 dwellings, 11 mercantile stores, 2 potteries of stone ware, 1 nail factory, 1 extensive rope walk, 1 boat yard, a market house, court house and jail, a public library, a printing office, 1 bookstore, and a post office that receives and dispatches the mail to the eastward by stage twice a week, and once a week to the westward.

The United States road from Cumberland, striking the Ohio at Wheeling, will tend very much to accelerate the growth of the town. That favourable circumstance, added to its being an excellent place for embarkation, will doubtless render Wheeling a place of considerable importance in a few years. It is now a place of business, and has a great thoroughfare of people from all parts of the United States travelling through it.

Wheeling is the seat of justice for Ohio county Vir-

ginia, by land 58 miles southwest of Pittsburgh, and 140 miles W. by N. of Cumberland. Not far from this place a wall is said to have been discovered some feet under ground, regularly built, apparently the work of art.—Wheeling creek empties into the Ohio just below the town, and on the point of land formed by it and the river, stands the remains of an old fort, a Virginia frontier post.

Wheeling is well supplied with fossil or stone coal from the hills, fish from the Ohio, and the market is well furnished with all the necessaries of life at a cheap rate. Public inns are numerous and tolerably well regulated.

No. 19, M'Mahon's (Boggs') island, 2 | 98

Channel, at the upper end near the left shore, at the lower end near the island—just below a small creek puts in on the right side, called M'Mahon's creek.

Little Grave creek, left side (ripple.) 9 | 107

Half a mile above this creek is a sand bar, channel between it and the left shore.—Here is a mound of earth, called an Indian grave. It is of a conical form, about 70 feet high. It ascends in an angle of about 80°. The diameter of the top is about 60 feet, the margin encloses a regular concave, sunk about four feet in the centre. Its summit bears an oak tree 3 feet in diameter.

The hills of Grave creek furnish excellent coal and in great abundance.—Here resides a Mr. Tomilson.—Half a mile below Little Grave creek is

Big Grave creek, same side, right shore.

Grave creek ripple, just below the creek,

Channel one third over from the left bank.

No. 20, Captina island, channel left side. 5 | 112

Captina creek, $\frac{3}{4}$ of a mile below, right side.

Baker's Station, left bank, channel left shore. 2 | 114

Sunfish c. right side, $\frac{1}{2}$ mile below B. Station.

(See MAP 3. page 49.)

No. 21, Wood island, channel right side, (Cressap's just above.)

Fish creek, left side, just below No. 21. 3 | 117

No. 22, is a large sand bar,

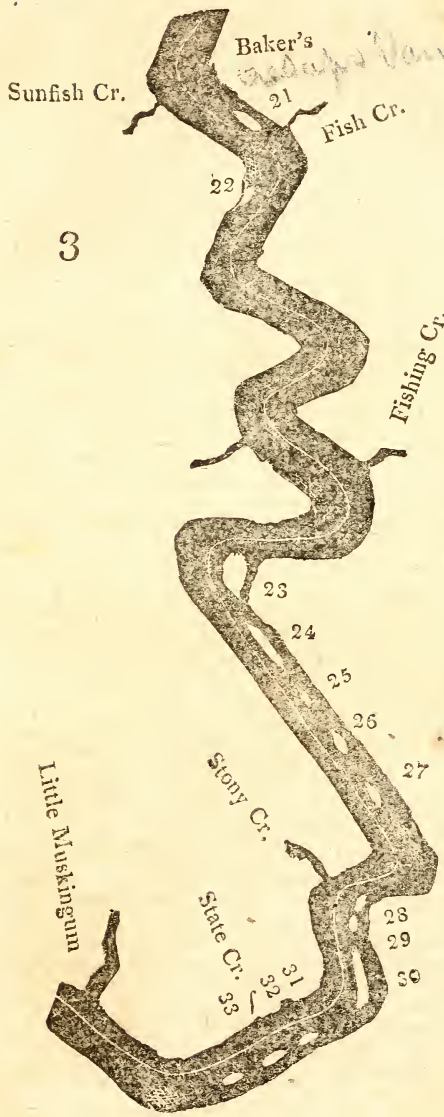
About a mile below Fish creek, channel nearest the left shore.

Proctor's run, left side (Well's just above,) 6 | 123

Just below this run is a sand bar, channel close to the bar, leaving it a little to the left.—Two miles below Proctor's run a creek enters on the right side.

Fishing cr. and Martin's Station, left shore. 5 | 128

Just below is a sand bar, best channel on the left shore. The river here winds considerably to the right, when you enter the head of


Baker's
Sunfish Cr.
21
Fish Cr.
22
3
Fishing Cr.
23
24
25
26
27
Stony Cr.
Little Muskingum
State Cr.
28
29
30
31
32
33

Long Reach, and Peyton's I. No 23. *(M. D.)* 2 | 138

In this reach which is remarkably straight, are five islands, first, Peyton's island No 23, Williamson's island No 24, Pursley's island No 25, Wilson's island No 26, John Williamson's island No 27, all of which keep to the left. Opposite Wilson's island, on the right side, is a run and a bridge across its mouth.

End of Long Reach, *(M. D.)* 16½ | 146½

A sand bar near the left shore, channel right shore.

Stony creek, right shore, half a mile below.

Little island No. 28, Bat island No. 29, 2½ | 149

These two islands are connected by a bar, channel right side.

No. 30, Middle island,

French creek just below it, right side.

Channel right shore past No 30, as well as past the Three Brothers, 1st B. No 31, 2d B. No 32, 3d B. No 33.

State cr. right side, opposite the middle of No 32.

End of 3rd Brother, No. 33. 10 | 159

Just below the 3rd Brother is a small willow island—and a sand bar, channel near the right shore.

Bull creek, left side. 4 | 163

From above this creek keep the right shore for two miles.

Little Muskingum river, right side, 5 | 168

Has a handsome Chinese bridge over its mouth.

(See MAP 4. page 52.)

No. 34, Duval's I. best channel right shore.

Duck creek, right shore, opposite No. 34.

Muskingum river, (that is Elk's eye,) right side, *(M. D.)* 4 | 172

This is a fine gentle river, 250 yards wide at its mouth, and navigable without any obstructions to the Three Legs, 110 miles up, with large batteaux, and to a little lake at its head 45 miles further, with smaller ones; from thence by a portage of about one mile, a communication is opened to lake Erie, through Cuyahoga, which at its mouth is wide and deep enough to receive large sloops from the lake.—The legislature of Ohio has passed a law to raise by way of lottery the sum of 12,000 dollars for improving the navigation of these two rivers. The Big salt spring is 8 miles from the river and 50 from Marietta, it yields water sufficient to keep 1000 gallons constantly boiling, ten of which yield a quart of superior salt.—At the mouth of this river a ferry boat is carried rapidly across by means of a rope extending from bank to bank, and a windlass ingeniously worked at each end.

MARIETTA,

Is finely situated at the mouth of Muskingum, having about 90 houses on the upper and 30 on the opposite bank, where Fort Harmar formerly stood. A bank was established here in the summer of 1807, capital 100,000 dollars, of which Rufus Putnam is President. Ship building is carried on here with spirit.—It has one printing office, a post office, 2 rope walks, a court and market house, and an academy. The inhabitants are principally New Englanders, whose industry is as proverbial as their system of life is economical, moral and religious. About a mile above Marietta and on the bank of the Muskingum are some curious remains of Indian fortifications. Marietta is the seat of justice for Washington county, Ohio, Lat. 39° 34′ N. Long. 82° 9′ W.—About 146 miles southwest of Pittsburgh by land.

ZANESVILLE, the seat of justice for Muskingum co. is seated on the E side of the Muskingum river, 50 miles by land above Marietta. It contains 60 families.

SPRINGFIELD, another new town, is on the opposite side of the river

Mile creek, right side.	1	173
No. 35, Muskingum island,	2	175
Channel close to the island on the right side.		
No. 36. Second island, channel left side.	4	179

VIENNA,

A small village on the left bank, half way between second and third islands

No. 37, Third island, channel right side.	3	182
Congress cr. puts in just below 3rd island, right side.		
Little Kanhawa, left side, *(M. D.)*	2½	184½

Is a large water interlocking with the waters of the Monongahela. Just above its mouth stands

WOOD COUNTY (V.) COURT HOUSE.

A town from its situation, which may yet rise to considerable importance.

Belleprie Settlement, is on the opposite side of the Ohio to Little Kanhawa, and extends from above it to the end of

No. 38, Blannerhasset's beautiful island.*	6½	191
Channel right side, near the right shore—just below No 38 are two small islands.		

* *Blannerhasset's island*—"On ascending the bank from the landing, (a quarter of a mile below the eastern end,) we entered at a handsome double gate, with hewn stone square pilasters, a gravel walk, which led us about 150 paces to the house, with a meadow on the left, and a shrubbery on the right, separated by a low

4
Marietta
Muskingum
34
36
35
Vienna
Bellepre
37
Little Hockhocking
Big Hockhocking
38
Little Kenhawa
39
Belleville
40
41
Shade R.
Great Sandy Ck.
42
Le Tart's Falls
43
44
45

Little Hockhocking right side,	3	194
Just below a small creek enters on the right side.		
Newbury Settlement and island No. 39.	2½	196½
Channel right side.—A cavern just above Newbury.		
No. 40, Mustaphy's island, ch. right shore.	1½	198
Great Hockhocking river, right side, (M. D.)	2½	200½

This is a considerable river of Ohio State, navigable 70 miles LANCASTER, a new and thriving town, is situated at ts head. On this river are quarries of free stone, mines of iron ore, and one of lead is said to have been discovered, salt springs and coal also abound.

Lee's creek, left side,	2½	203

BELLEVILLE, a town and settlement on the left bank, just below Lee's creek, from which to the town the channel is close to the left shore, the other part of the river being rocky.

No. 41, Belleville Island, chan. right shore,	2	205
Pond creek, left side, channel left shore,	1	206

Devil's Hole, a remarkable cavern, just above Shade river: It is in the face of a rock, about half way up a steep hill, close to the river.

Shade river, right side,	6	212

There are three small creeks emptying in between Pond creek and Shade river, on the right side—Passing Shade river in high water keep pretty close round the left hand point, to avoid being thrown on dangerous rocks in the bend both above and below the mouth of the river. One mile below is a *sand bar*, channel at the upper end near the right shore, at the lower end near the middle of the river. A little farther two runs empty in opposite each other.

hedge of privy-sally, through which innumerable columbines and various other hardy flowers were displaying themselves to the sun. The house is built of wood, and occupies a square of about 54 feet each side, is two stories high, and in just proportion; it is connected with two wings, by a semicircular portico or corridor running from each front corner. The shrubbery well stocked with flowering shrubs, and all the variety of evergreens natural to this climate, as well as several exotics, surrounds the garden, and has gravel walks labyrinth fashion winding through it. The garden is not large, but seems to have had every delicacy of fruit, vegetable and flower, which this fine climate and luxurious soil produces. In short Blannerhasset's island is a most charming retreat for any man of fortune fond of retirement, and it is a situation perhaps not exceeded for beauty in the world. It wants however the variety of mountain—precipice—cataract—distant prospect, &c. which constitute the grand and sublime." *Tour from Philadelphia, &c.*

An original work preparing for press.

Two small creeks opposite each other, and two sand bars, one opposite the left hand creek, and the other a little below it, 4 miles below Shade river. Channel to the left of the first bar, and to the right of the second.

No. 42, Amberson's, or, Buffentin's Island. 10 222

Channel right side, close to the right point round the island.

V. Little Sandy creek, left shore, opposite No. 42.

Big Sandy creek left side. 3 225

In the the bend half a mile below Big Sandy, on the right shore, is a dangerous ledge of rocks ; and a little farther down on the left shore is another ledge equally dangerous ; to avoid both, keep as near the middle of the river as you can after passing Amberson's island.—From below these rocks, the river winds to the right and grows very narrow, being not more than 140 yards wide.

Large sand bar, left side, channel right shore, 4 229

Oldtown creek, right side, 3 232

A creek right side, large sand bar left side, 1 233

Channel to the right of the bar or small island.

No. 43, George's island, and sand bar, 5 238

The channel runs near the upper point of the island on the right side of it, and when you get two thirds down turn short towards the right shore through the bar, leaving two large breakers to the left.

Big and Little Mill creeks, left side, 2 240

Two miles below a Big run empties in on the right side.

Letart's rapids & No 44 & 45 Is. above them, 5 245

Channel past No. 44, is near the right shore, thence steer for the head of No. 45, keeping it to the left; thence keep one third over from the right shore until you pass the rapids, leaving the big rocks to the right. —Two miles below Letart's rapids is a sand bar on the right shore, and some snags below the bar.—A squire Sears lives at the rapids on the left bank and has a mill on the right shore : from hence the river winds to the right.

West creek, left, Dunham's run right side, 6 251

Channel near the left shore—a ferry just below.

A ripple, channel near the middle of the river, 5 256

About one mile below is another ripple, ch right shore.

Sliding hill and creek, just below it, left side, 3 259

Nailor's Branch, right shore, 4 263

Leading creek right, coal bank left side, 5 268

Ten mile creek above Kanhawa, left shore, 3 271

(See MAP 5. page 56.)

No. 46, Eight mile I. channel right side, 3 274

No. 47, Six-mile island, channel same side, 3 277

Just below is Kayger creek, right side—Here is a stratum of slate coal.

Campaign creek, right side, 3 280

This creek is so called from General Lewis's carrying on a campaign against the Indians, after the battle of Point Pleasant.

Great Kanhawa river, left side, *(M. D.)* 3 283

This is a considerable river of Virginia, 500 yards wide at its mouth, and might be taken for the Ohio, especially when ascending that river. It has gentle navigable water for 10 miles, thence for 60 miles to the falls the water is rapid and difficult of navigation. By a portage of a few miles through the mountain which occasions the falls, a communication may be had between the waters of the Great Kanhawa and the Ohio, and those of James river, which falls into Hampton Roads, on the coast of Virginia, and is navigable for ships of 40 guns to Jamestown, and those of 125 tons go to Rocket's, one mile below Richmond.

POINT PLEASANT,

A small town situated at the confluence of the Great Kanhawa with the Ohio, commanding a handsome view of that river. It is a place of considerable embarkation for those descending the Ohio from the western parts of Virginia, and may in consequence become a place of some importance.

Immediately below Point Pleasant, pass over to the right shore, to be ready for

No. 48, Galliopolis island, 8 286

Channel left side, near the island at the upper end, when half way down it, the channel runs immediately to the left shore, thence over towards the town of

GALLIOPOLIS,

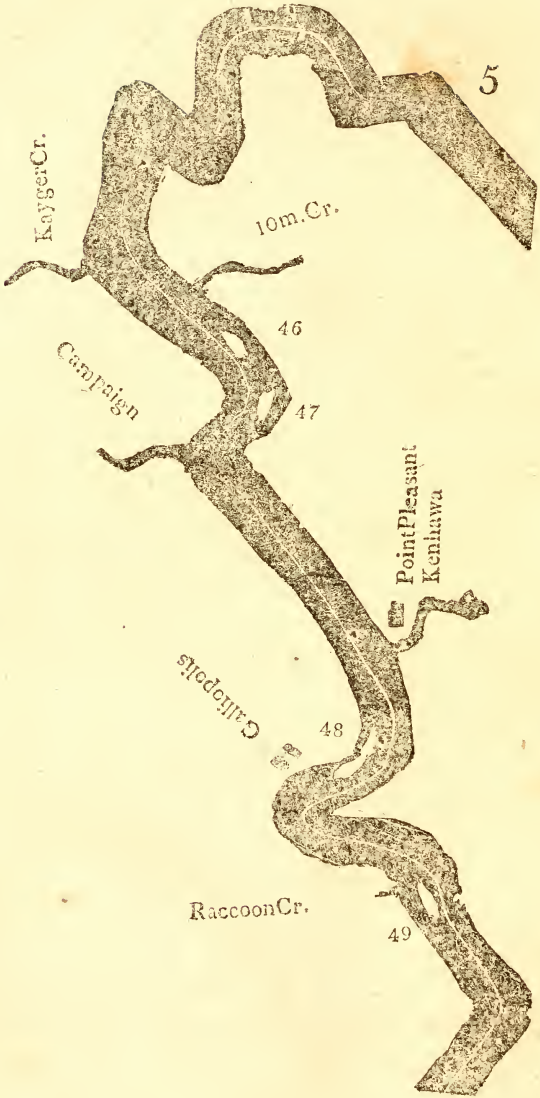
Which is situated on the right bank of the river, state of Ohio. A few years ago it contained 100 French families; the titles of their land proving invalid occasioned them to desert the town, which has since been much on the decline.—At the lower end of the first point below Galliopolis, on the right hand, are some snags extending half across the river.

No. 49, First island below Galliopolis, 7 293

Channel past this island begins in the middle of the river, between it and the left shore, and bears towards the lower point of the island, opposite the end of which are rocks and snags in the middle of the river.

Racoon creek, right side, opposite No. 49,

Meridian creek, left shore, (a run below it.) 8 301


5
Kayger Cr.
10m. Cr.
46
Campaign
47
Point Pleasant
Kenhawa
Gallopolis
48
Raccoon Cr.
49

(*See MAP* 6, *page* 58.)

Eighteen-mile creek, right side,	2	303
Swan creek, right side, (a run above it,)	2	305
Little Guyundat creek, left shore,	1	306

The entrance of Little Guyundat occasions a bar just below its mouth called *Greenbury Bottom bar*, and this makes the ripple called *Straight Ripple*—The channel is to the right of the bar, about one third over from the left bank. About 2 miles below Little Guyundat on the left is a *Hanging rock*, and on the right is a stratum of Potters' clay.

Federal creek, right shore,	7	313
Nine-mile creek, left side,	5	318
Seven-mile creek, same side,	2	320
Bluff and Tavern, right side,	1	321
Big Guyundat, 80 yards wide, left side (M D)	$5\frac{3}{4}$	$326\frac{3}{4}$

Here is a long and difficult ripple; the channel runs near the left shore above the creek, and when in full sight of its mouth, it crosses the river at nearly right angles, until near the right shore, thence it bears towards the middle of the river—This ripple continues to a creek one mile below Guyundat.

Indian creek, right side,	$3\frac{1}{4}$	330
Indian Guyundat, right side,	2	332
Ten Pole creek, left side, $\frac{1}{4}$ mile below I. G.		
Twelve Pole creek, a fine creek, left side,	3	335
Great Sandy, or Tottery R. left side, (M D)	$6\frac{1}{4}$	$341\frac{1}{4}$

Just above Sandy is a bar, channel in the middle of the river through the bar. Half a mile below is a large gut.

Great Sandy river is the dividing line between the states of Virginia and Kentucky.

Tottery is navigable with batteaux to the Ouasioto mountain. It is a long river, has few branches, and interlocks with Red creek, or Clenche's river, (a branch of the Cherokee)—Here the large Reed or Carolina Cane grows in great abundance, even upon the upland, and the winter is so moderate as not to destroy it.

A creek left shore, a run right shore,	$8\frac{3}{4}$	350

(*See MAP* 7, *page* 60.)

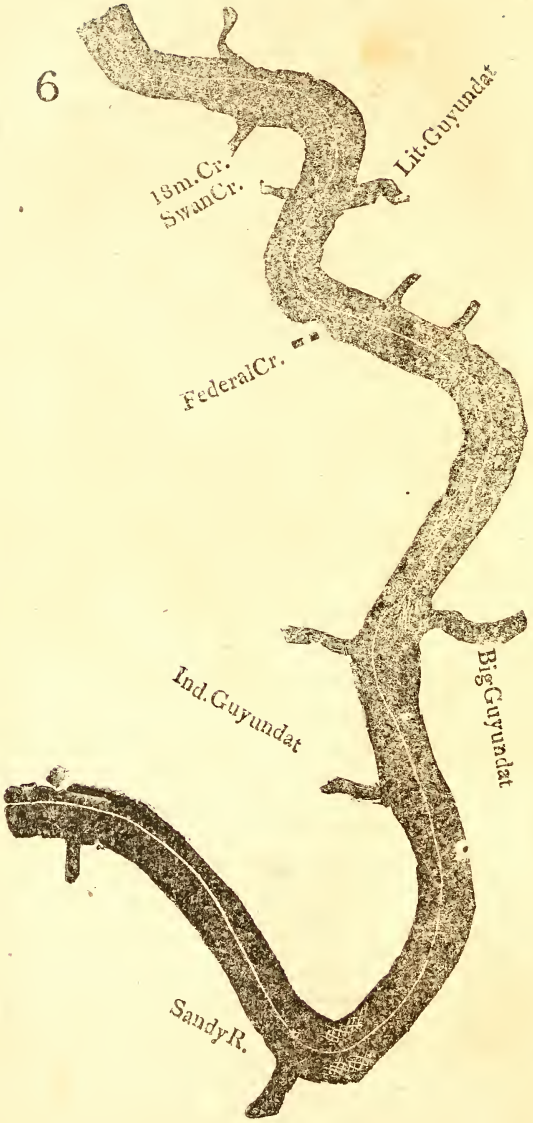
Big Stone creek, right side.	3	333

One mile below, is a hanging rock, left side.

Ferguson's bar,	4	357

A good channel on the right shore. The water from this bar to one mile below Little Sandy is very shallow.

K. Little Sandy creek left side, channel middle of the river.	7	364


6
18m.Cr.
SwanCr.
Lit.Guyundat
FederalCr.
Ind.Guyundat
BigGuyundat
SandyR.

The French Grant is opposite Little Sandy in Ohio; it is a tract of 20,000 acres, extending eight miles on the river, granted by Congress to the French settlers at Galliopolis, as some indemnification for the losses they had sustained; and 4,000 acres adjoining, granted to Mon. Gervis, for the same purpose. On this last tract Mr. Gervis has laid out a town called BURRSBURGH.

Hale's creek, right side, 12 376

Little Sciota river, 30 yards wide, right side, 2 378

A ledge of rocks puts out here and extends half across the river—the channel at the upper end of the bar is near the left shore; at the lower end, close around the rocks.

Half a mile below Little Sciota is another bar extending also half way across the river; channel midway between the point of the bar and the left shore.—Just below this last bar on the right bank is *Stony Point*; and a little above it is every appearance of a body of iron ore.

Tiger's creek, left side. 7 385

Big Sciota river, *(M. D.)* 5 390

This is a large and gentle river of the state of Ohio, bordered with rich flats, meadows, or prairies. It generally overflows in the spring, and then spreads about half a mile, though when confined within its banks it is scarce a furlong wide. Besides having a great extent of most excellent land on both sides of the river, it is furnished with *salt* on an eastern branch, and red bole on Necunsia Skeintat. It is passable for keels, batteaux, &c. a considerable way, and for smaller crafts near 200 miles to a portage of only 4 miles to Sandusky, which empties into lake Erie, and at its mouth is large enough to receive sloops.—The mouth of the Big Sciota river, according to Mr. Hutchins, is in North lat. 38° 43′ 28″

CHILICOTHE, at present the seat of government for the state of Ohio, is situated on the west bank of Sciota, 47 miles by land from its mouth. (*See Description, p.* 66)

ALEXANDRIA

Stands immediately below the mouth of Sciota, and

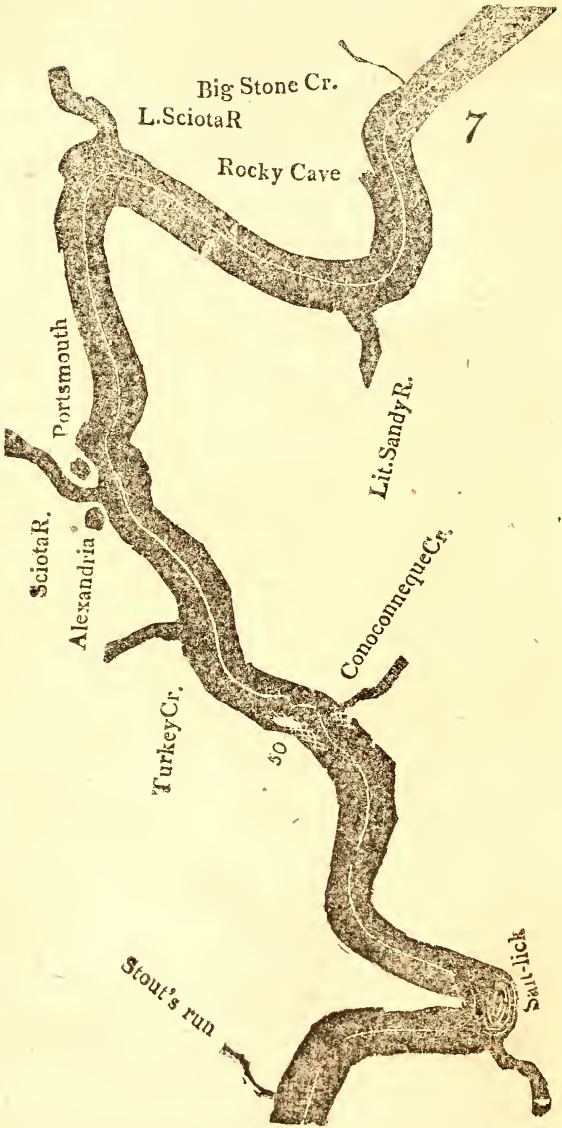
PORTSMOUTH

About half a mile above it. Both these villages are but young, (Portsmouth being the junior,) and they progress but slowly; but in time may become, from their eligible situation, of considerable consequence.—Goods destined for the upper settlements on the Sciota, are deposited at both these towns, whence they are boated up that river in keels, periogues, &c.

Just above Portsmouth, are high hills topped with pine trees.

Turkey creek right, Conic hills left side, 5 395

Half a mile above this creek, is the residence of Major Belisle.


Big Stone Cr.
L.SciotaR
Rocky Cave
7
Portsmouth
SciotaR.
Alexandria
Lit.SandyR.
ConoconnequeCr.
TurkeyCr.
50
Stout's run
Salt-lick

Conoconneque creek, left side, (Colgins.)	9	404

No 50, Willow island and bar—lie close to the right shore, between Conoconneque and a small creek on the right shore called *Pond* creek. The channel begins half way between the island and left shore, then it bears off round a bar at the mouth of Conoconneque creek, thence it turns short to the left shore, to avoid the island-bar which reaches nearly across the river, it keeps the main shore for a small distance, and then takes to the middle of the river, the left shore being full of rocks and sunken trees.

About 3 miles below the above creeks and island, on the right shore, is an insulated mountain, 500 feet high.

A Sand bar, about five miles below Pond creek—channel near the left shore.

Twin cks. entering close together, right side.	8	412
Salt Lick creek, left shore,	6	418

This creek empties in just below a short turn of the Ohio to the right; and near its mouth, are some *Salt Furnaces*, in a little town called VANCEVILLE, at which are made large quantities of salt—From these Salt Works to Lexington it is 70 miles.

The best water here is in the middle of the river, both beaches being very rocky; but there is a good Landing place in an eddy 400 yards above the creek, and also at the mouth of the creek.

In high water the rocks and eddy form a whirlpool

Pond run left, Stout's run, right side.	5	423
A creek, right side,	5	428

Here the river is half a mile wide.

(See MAP 8, page 63.)

Graham's station, Kennedy's bottom, left side	1	429
No. 51, Wilson's I. and Brush cr. right side,	5	434

Just below No 51, is a large log; and between it and the right shore is a sawyer, which keep to the right.

ADAMSVILLE

A small village situated on the right bank of the Ohio, just below the mouth of Brush creek, and opposite No 51.

Sycamore creek, left side,	2	436

The channel from this creek to the two islands below is near the left shore

Donaldson's creek, right side.	2	438
Two Is. No 52 left, Massey's No 53, right.	4	442

Channel past these two island's is on the left, midway between No 52 and the shore; after you pass them, bear for the lower end of Manchester, to avoid a sand bar on the left shore opposite Isaac's creek, which puts in one mile below the town, on the same side with it.

MANCHESTER

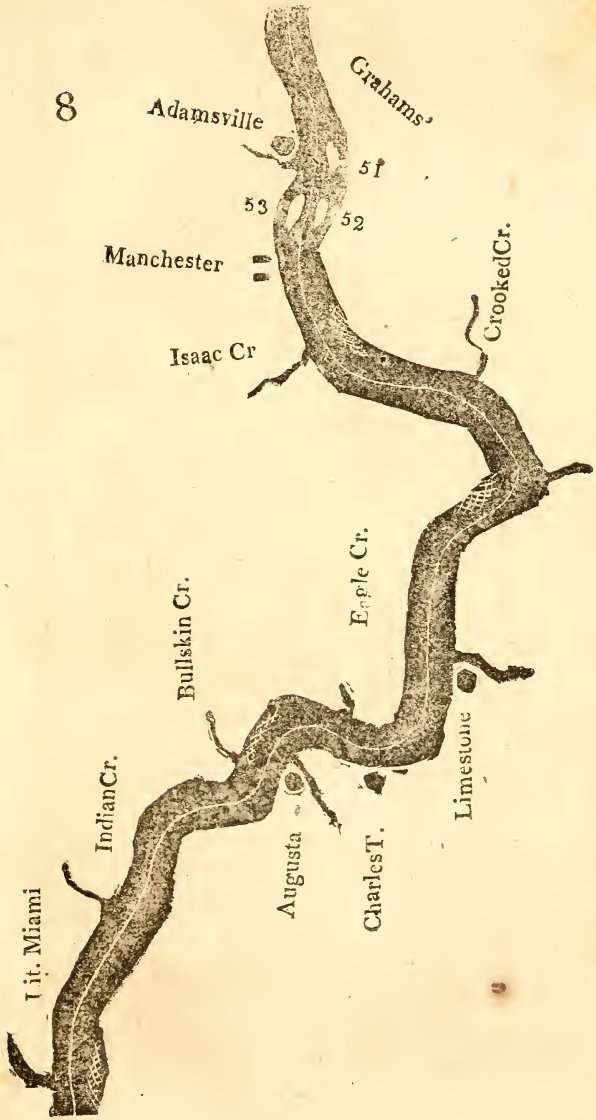
Is a little town pleasantly seated on the right bank of the Ohio, just below the foot of Massey's island, No 53. It commands a charming view of the river.

Crooked creek, left side.	7	449
A run right side one mile below.		
Cabin creek, left side,	2	451
The river here turns to the right.		
William Brooke's creek, left side,	4	455
A sand bar on the right shore; the best water is near, but not close to the left bank.		
Madison's & the town of LIBERTY, left side	2	457
Limestone creek, and the town of MAYSVILLE, or LIMESTONE, (K.)	1	458

This is the oldest and most accustomed *Landing Place* on the Ohio. The landing is good, and the mouth of the creek affords a safe harbour for boats. At the landing are several Store Houses well accommodated for the storage of merchandize, wares, &c these are kept by Messrs. January, Martin, and Haughy, whose obliging and accommodating dispositions, render the transaction of business with them safe and comfortable.—Their charges and commissions are considered moderate, and their attention strict and punctual.

Maysville is in Mason county, (K) situated on the south side of the Ohio, and on the west side of Limestone creek. It stands on a lofty and uneven bank, and is not seen from the river until you are within two miles of the town. Mr Ellicot, in his Journal says "It is a miserable village." There is, however a great deal of business done here; it has about 70 houses, a post office, several mercantile stores, and public inns. Vessels of considerable burden have been built here, launched and taken down the Mississippi with success. It is 4 miles northeast of Washington, the seat of justice for Mason county*.

* LEXINGTON is about 60 miles S W of Maysville—It is the largest and most flourishing town in the state of Kentucky, though not the capital of it. It is the seat of justice for Fayette County, and is finely situated in the heart of a well cultivated, thickly settled, and rich country, on the north side of Town Fork, a small stream which falls into the S branch of Elkhorn river—It has a court house, jail, market house richly supplied with the produce of the adjacent country; 4 places of public worship, a Banking company, about 400 houses, many of which are handsomely built, and 2400 inhabitants; 30 mercantile stores, several of which are large wholesale houses; a public academy, and other well regulated schools; 2 printing offices issuing weekly gazettes, one bookstore and bindery; a large


8
Adamsville
Grahams'
51
53
52
Manchester
Crooked Cr.
Isaac Cr
Bullskin Cr.
Eagle Cr.
Limestone
Indian Cr.
Augusta
Charles T.
Lit. Miami

CHARLESTOWN, left bank,	7	465
In the middle of the river opposite Charlestown, is a large sand bar; the channel is between the bar and the town, then crosses to the foot of the bar.		
Eagle creek, right side,	1	466
This is the first water of any consequence below Limestone.		
Straight creek, right side,	5	471
Opposite this creek is a sand bar, channel left shore.		
Whiteoak creek, right side,	5	476
Bracken creek, left side,	3	479
Opposite this creek is a sand bar, channel left shore.		
AUGUSTA.		
A small village at the mouth of Bracken creek.		
Bullskin creek, right shore,	5	484
Channel one third over from the left shore—Half a mile below this creek is a sand bar on the left shore, the channel is near the right shore.		
Indian creek right side,	16	500
Channel by the middle of the river.		
Ten Mile creek, right shore,	10	510
Little Miami river, right side, (M. D.)	6¼	516¼
Just below the mouth of this river a small sand bar puts out on the right shore; the channel is on the left shore about half way to Columbia, then it crosses the river about two thirds over towards the right shore—Thence to Cincinnati the channel continues near the right shore		
Little Miami (or as Hutchins calls it Little Mineami river) has much fine land and several salt springs, high banks and gentle current, but it is too small for batteaux to navigate it.		

Duck manufactory, and another for manufacturing Cotton and Muslin; 4 large rope walks, 2 nail factories, and many other useful manufactories carried on with spirit; all of which are duly encouraged by the body of the citizens, the only sure pledge of their success.

Lexington in fact is a place of great business, and the inhabitants seem peculiarly and happily calculated to enjoy their situation, and the hospitality and friendship of each other. This prevailing disposition in the people, makes the place very lively, and highly agreeable to strangers—It is 22 miles E S E of Frankfort, and about 335 by land S W of Pittsburgh, Lat 38° 6′ N. Long. 85° 8′ W.

Near Lexington are found curious sepulchres full of human skeletons; and the remains of two ancient fortifications, furnished with ditches and bastions, overgrown with large trees—A regularly walled well is also said to have been discovered by a person digging five or six feet beneath the surface: over the mouth of the well a large flat stone was found.

(See MAP 9, page 67.)

COLUMBIA

Is a small and pleasant village situated immediately below the mouth of the Litt'e Miami river.

Crawfish creek, right side,	23½	519
Deer creek, right side,	4	523
Licking river, left side, (M. D.)	1¼	524¼

This is a considerable stream of Kentucky, navigable for about 70 miles, and towards its head the cane or reed grows in great plenty.

NEWPORT

A small town pleasantly situated just above the junction of Licking with the Ohio river—It has an Arsenal, or place of deposit, a magazine of public arms, ammunition, &c. It is an elegant brick building.

CINCINNATI

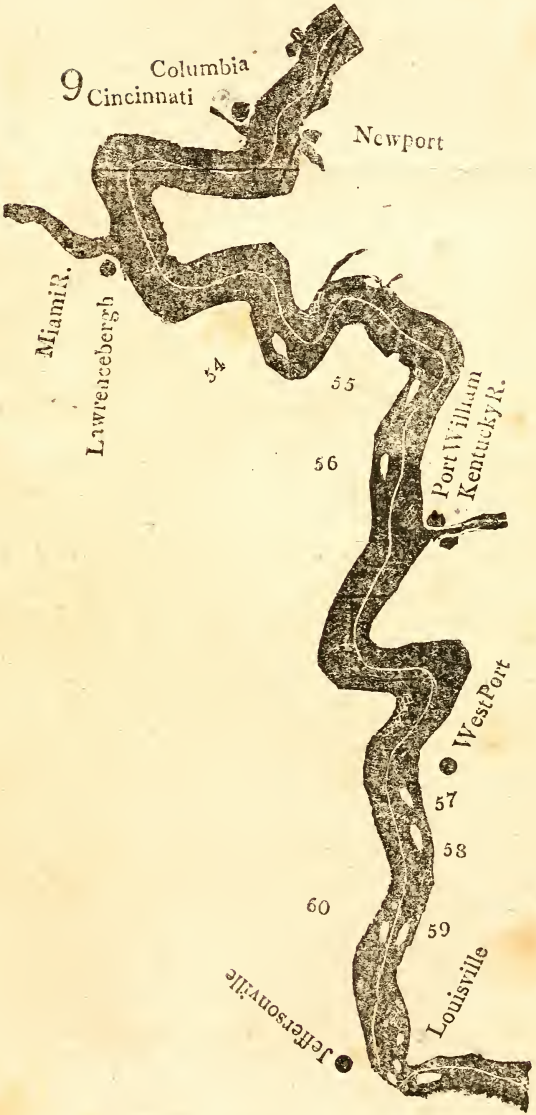
Is handsomely situated on a first and second bank of the Ohio, opposite Licking river—It is a flourishing town, has a rich, level, and well settled country around it. It contains about 400 dwellings, an elegant court house, jail, 3 market houses, a land office for the sale of Congress lands, 2 printing offices issuing weekly gazettes, 30 mercantile stores, and the various branches of mechanism are carried on with spirit—Industry of every kind being duly encouraged by the citizens, Cincinnati is likely to become a considerable manufacturing place—It is 82 miles N by E of Frankfort, and about 380 by land S S W of Pittsburgh, N Lat 39° 5′ 54″ according to Mr Ellicot, and West Lon 85° 44′. While the now state of Ohio continued under a Territorial government, Cincinnati was the seat of public business, and it continued to be so for several years after that State was received into the Union, which was in the year 1802. It was afterwards removed to Chilicothe, where it still remains. It is the principal town in what is called Symms's purchase, and is the seat of justice for Hamilton county, Ohio. It has a Bank issuing notes under the authority of the State, called "*The Miami Exporting Company*"—The healthiness and salubrity of the climate; the levelness and luxuriance of the soil; the purity and excellence of the waters; added to the blessings attendant on the judicious administration of mild and equitable laws; the great security in the land titles; all seem to centre in a favourable point of expectation, that Cincinnati and the country around it, must one day become rich and very populous, equal perhaps, if not superior to any other place of an interior, in the United States. The scite of Fort Washington

is near the centre of the town ; it was a principal frontier post—It is now laid out in town lots.		
Mill creek, right side,	1 3/4	526
A large sand bar,	3	529
The channel close to the right shore is safe, but it is very narrow.		
North Bend,	16	545
In low water here is a great sand bar, channel right shore—From the North Bend to the Great Miami, the channel is in the middle of the river, there being large sand bars on both shores.		
G. Miami* (or *Mineami*) R. right side, *(M. D.)*	6	551

* Before we quit the State of Ohio (at the Western boundary of which we have now arrived,) it may not be amiss to give a short description of Chilicothe, the Capital, for which we are indebted to a work now preparing for the press, entitled a Western Tour from Philadelphia in 1807.

CHILICOTHE, which signifies *town* in the Indian dialect, is most beautifully situated on the banks of the Scioto, about forty five miles by land, and nearly seventy following the meanders of the river from its confluence with the Ohio, which it joins between Portsmouth and Alexandria—In all that distance, the river has a gentle current, and unimpeded navigation for large keels and other craft of four feet draught of water—It continues navigable for smaller boats and batteaux upwards of one hundred miles above the town towards its source to the Northward, gliding gently through a naturally rich, level, and rapidly improving country. The situation of the town is on an elevated and extensive plain of nearly ten thousand acres of as fine a soil as any in America, partly in cultivation, and partly covered with its native forests. This plain is nearly surrounded by the Scioto, which turning suddenly to the N E from its general Southerly course, leaves the town to the Southward of it, and then forms a great bend to the Eastward and Southward.

Water Street, which runs about E by N parallel to the Scioto, is half a mile long and contains ninety houses—It is eighty four feet wide and would be a fine street, had not the river floods caved in the bank in one place near the middle almost into the centre of it. There is now a lottery on foot to raise money for securing the bank against any further incroachments of the river. Main Street parallel to Water street, is one hundred feet wide, as is Market street, which crosses both at right angles, and in which is the Market house, a neat brick building eighty feet long—The Court house in the same street, is neatly built of free stone on an area of forty five by forty two feet, with a semicircular projection in the rear, in which is the bench for the judges, It has an octagonal belfry rising from the roof, painted white with green lattices, which is an ornament to the town, as is the small plain belfry of the Presbyterian Meeting house, a handsome brick building in Main street ; in which street


9
Columbia
Cincinnati
Newport
Miami R.
Lawrenceburgh
54
55
56
Port William
Kentucky R.
West Port
57
58
60
59
Louisville
Jeffersonville

At the mouth of this river is a sand bar, channel on the left shore; and about 300 yards below is another sand bar on the same side, channel midway between the bar and the right shore.

The Great Miami or Rocky river, has a very stony channel, a swift stream, but no falls; is 200 yards wide at its mouth; at the Piccawee towns, 75 miles up, it is contracted to the breadth of 30 yards; it is nevertheless, navigable for loaded canoes 50 miles above these towns. The portage from its western branch into the Miami

also is a small brick Methodist Meeting house. These are the only places of public worship in the town, if I except the Court house which is used occasionally by the Episcopalians and other Sects:

The whole number of dwelling houses as I counted them in Chilicothe is two hundred and two, besides four brick, and a few framed ones now building. I reckoned only six taverns with signs, which small proportion of houses of that description speaks volumes in favour of the place. There are fourteen stores, a Post office, and two printing offices, which each issues a gazette weekly.

The scite of the town being on a gravelly soil, the streets are generally clean—The houses are of free stone, brick, or timber clapboarded, the first of which is got in the neighbourhood, is of a whitish brown colour, and excellent for building—They are mostly very good, and are well painted. On the whole, I think Chilicothe is not exceeded in beauty of plan, situation, or appearance by any town I have seen in the western part of the United States.

There is here a remarkable Indian monument in Mr. Watchup's garden in the very heart of the town. Like that at Grave creek, it is round at the base, about seventy or eighty feet diameter, but differs from it, by being round instead of flat on the top, which has an elevation of about thirty feet perpendicular from the level of the plain. It is formed of clay, and though it has been perforated by the proprietor nothing has been found to justify the common opinion of these mounts having been barrows or cemetries —They talk of having it levelled, as it projects a little into Market Street, but I think it a pity to destroy any of the very few vestiges of aboriginal population which this country presents to the curious and inquisitive traveller.

From a steep hill about three hundred feet perpendicular height, just outside the Western extremity of the town, is a most charming view, of the streets immediately below, under the eye like a plan on paper: Then the Sciota from one hundred to one hundred and fifty yards wide, winding on the left, with some low hills about two miles beyond it terminating the view to the northeast; while to the eastward and westward, as far as the eye can reach both ways, is spread a country partly flat, and partly rising in gentle swells, which if cultivation proceeds in equal proportion to what it has done since Chilicothe was first laid out about ten years ago, must, in a very short time present one of the finest landscapes imaginable.

of lake Erie, is five miles ; that from its eastern branch into Sandusky river, is nine miles.

LAWRENCEBURGH, right bank.	3	554

This town stands in a low rich bottom ; it is the seat of justice for Dearborn county, Indiana Territory.

Loughry's creek, right side,	8	562

Here is a great bar, channel close to the right shore.

No. 54, Grape or Loughry's I. 1 mile long.	4	566

Channel on the left shore.

Chambers's bar,	4	570

Here is also a very hard ripple, channel close in to the right shore, under a high bank.

Gunpowder creek, left shore.

At the mouth of this creek is a rocky ripple ; channel close to the left shore until near the creek, then it runs into the middle of the river.

Big Bone* Lick creek and bar, *(M. D.)*	13½	583½

Channel close to the left shore ; from thence to the Nine Mile island you have fine water to ride in.

* Animals bones of enormous size have been found here in great numbers. Some skeletons nearly complete were not long since dug up 11 feet under the surface in a stiff blue clay: These appeared to be the bones of different species of animals, but all remarkably large. Some were supposed to be those of the Mammoth, others of a Non-descript. Among these bones, were two horns or fenders, each weighing 150 pounds, 16 feet long, and 18 inches in circumference at the big end ; and grinders of the carnivorous kind weighing from 3 to 10 1-2 lb. each ; and others of the graminivorous species, equally large, but quite differently shaped, being flat and ridged.—Ribs, joints of the backbone, and of the foot or paw, thigh and hip bones, upper jaw bone, &c. &c. were also found, amounting in the whole to about five tons weight.

These bones were principally discovered by Doctor Goforth and Mr Reeder of Cincinnati, who sent them by water to Pittsburgh, with an intention to transport them to Philadelphia, and make sale of them to Mr. Peale, proprietor of the Museum of that city.—They were however while in Pittsburgh, discovered by an Irish gentleman, a traveller, who purchased them, reshipped them down the Ohio, and thence to Europe, where no doubt he will accumulate a handsome fortune by exibiting them to the different courts of that continent.

Of the history of the Mammoth we are much in the dark.—Of animals having once existed carrying these enormous bones, there can be no doubt. Their present existence is much doubted ; and the only proof we have to the contrary, is a curious tradition of the Indians, handed down to them by their fathers, which being delivered by a principal chief of the Delaware tribe to the Governer of Virginia during the American Revolution, is recorded in the

No 55, A small willow island, ch. left shore.	20	60°	½
No 56, Nine mile island,	12	615	½

Here you must keep the left shore, and immediately below, bear over towards the right shore, and keep close in with the high bank until you are past the second brick house ; thence to the mouth of the Kentucky river, 3 miles, you have good water.—Five miles below No 56, is a large sandbar, channel on the right shore.

Kentucky river *(M. D.)*	12½	627	½

Gives name to the state it intersects, flows through a country of fine land, is navigable during the seasons of high water for loaded boats about 200 miles ; it is 90 yards wide at its mouth and also at Boonsborough, 80 miles above.

At the mouth of this river are two small towns, one below and the other just above its mouth—the latter is called

PORT WILLIAM,

Which, from its situation, as well as the village opposite it, may yet become a place of consequence.*

following words :—" That in ancient times a herd of these tremendous animals came to the Big-bone licks, and began an universal destruction of the bear, deer, elks, buffaloes, and other animals which had been created for the use of the Indians : that the Great Man above, looking down and seeing this, was so enraged, that he seized his lightning, descended on the earth, seated himself on a neighbouring mountain, on a rock of which his seat and the print of his feet are still to be seen, and hurled his bolts among them till the whole were slaughtered, except the big bull, who presenting his forehead to the shafts, shook them off as they fell ; but missing one at length, it wounded him in the side ; whereon, springing round, he bounded over the Ohio, over the Wabash, the Illinois, and finally over the Great lakes, where he is living at this day."

Jefferson's Notes on Virginia.

* FRANKFORT, the seat of government for the state of Kentucky, is situated on the east side of Kentucky river, about 60 miles from its mouth. It contains about 100 houses, three printing offices, one bookstore, a Circulating library, and book bindery ; 18 mercantile stores, a state bank established in the fall of 1807.—The state legislature meet here annually, and sit during the winter months. The town is improving fast in buildings, manufactories, &c.

There have been a number of vessels of burden built here and freighted with the produce of the country, to New Orleans, West India islands, &c. A few miles above Frankfort, on the Kentucky river, are two considerable Vineyards, which are likely to prove successfull in the manufactory of good wine.

A large bar on the left shore,	5¼	633

Channel close to the right shore.

From Kentucky river to Westport you have fine water, and a good settlement, and the sight of an ingenious machinery for carrying water from the river to a farm house on the bank.

WEST PORT	50	683

Is situated on a very high bluff on the left side of the river, and it is more remarkable on that account than for any thing else, there being but two or three houses in the place.

No 57, Eighteen Mile island, ch. right shore.	2	685
No 58, Twelve Mile island, ch. same side.	6	691
No 59, Six Mile I. and No 60, Goose island,	8	699

The channel runs between these two islands.

Four miles below these two last islands, and two above Louisville, there is a large bar near the left shore, which extends near one third across the river. After passing this bar, if you mean to land at Bear Grass creek, you must pull over for the left shore, so as to prevent your being drawn into one or other of the schutes over the Rapids.

(See MAP OF THE FALLS, page 72.)

Bear Grass creek Landing, left side, (M. D.)	6½	705¼

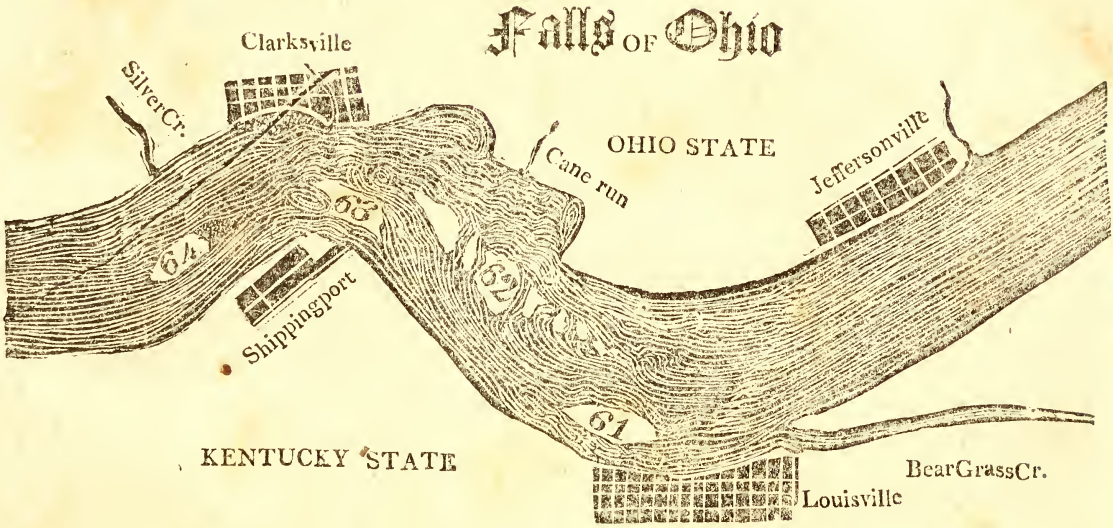
This creek is just above the rapid descent of the falls. At one of the most dangerous places to the Navigator of the Ohio, Nature, in her wise and providential works, has been kind enough to place one of the safest and best Harbours that is to be found on the whole course of that river. The current itself seems to be diligent in directing the vessel to this spot for safety, and in keeping it out of the *Indian schute;* which, were it not for the experienced and expert management of good pilots, would be a very hazardous passage.

This harbour affords 12 feet water in the driest seasons, from the mouth of Beargrass creek down to the middle of Corn island No 61, and extends a considerable way out into the river.—Vessels therefore of any burden may lie here in safety. Should they even get loose from their cables or fastenings, there is no danger of their being carried off by the current.

LOUISVILLE

Is situated at the mouth of Beargrass creek and extends down the Ohio to opposite the middle of Corn island No 61. It stands on an eminence of about 70 feet in height, which gently descends to a narrow plain along the river side in front of the town. From the lower end of the town the brow of the eminence takes its course to the Ohio opposite Sandy island No 64, leaving a high plain between it and the river. It contains about 150 houses, a printing office, several mercantile stores and warehouses, a post office, is a Port of Entry, and the seat of justice for Jefferson county (Ken.) Lat. 38.° 8′ N.

The river opposite Louisville is one mile and 25 poles wide, and


Falls OF Ohio
Clarksville
Silver Cr.
OHIO STATE
Cane run
Jeffersonville
64
63
62
61
Shippingport
KENTUCKY STATE
BearGrassCr.
Louisville

commands a most charming view both above and below for a great distance, and the eye is carried over an extent of level country, terminated by the hills of Silver creek, which are five miles distant.

A canal has been proposed to be cut on the Kentucky side, to commence a little below Beargrass creek, and open below Shippingport, a distance of 588 perches, or one mile and three quarters and 28 perches. The accomplishment of this object indeed would be a happy event to the trade of the Ohio. The highest ground through which the canal would have to be taken, would not exceed 29 feet and its average depth would be 20 feet 6 inches. The route throughout is a stiff clay, lying upon a bed of rock not exceeding 40 inches higher than the floor of the canal. The canal is calculated sufficiently capacious for a ship of 400 tons, and this would afford a column of water greater than 3 feet by 24, during the lowest stages, and 24 feet fall.

From the known enterprising disposition of the Kentuckians, we have little doubt but this contemplated canal will be completed in a few years. If encouragement be wanting, we cannot see why the legislatures of Virginia, Ohio, and Pennsylvania should not throw in their strength to accomplish an object which would doubtless prove very advantageous to the citizens of each of those states, as well as the state of Kentucky.

JEFFERSONVILLE.

Is a small county and post town opposite to Louisville, in the Indiana Territory. It is situated at the bend of the river on a high bank of loose ground, and therefore affords rather an unsafe harbour for boats. When boats take in pilots at this place, they come to a little above the town. From the bend to near the point opposite Goose island, are a first and second banks of handsome form and situation; at that point, the high land closes upon the river with a steep bank, which recedes not materially until near Silver creek. The high bank of loose ground continues for about six miles above Jeffersonville. The soil being loose the floods wash it considerably.

A canal on this side of the river has been spoken of; but it is thought that the expence would far exceed the completing one on the Kentucky side.

THE RAPIDS OF OHIO.

Are occasioned by a ledge of rocks which extend quite across the river, and are hardly to be perceived by the navigator in times of high freshes, unless by the superior velocity of the boat, which descends over them at the rate of from 10 to 13 miles an hour. When the water is low, the greater part of the rock becomes visible, and it is then that the passage becomes dangerous.

There are three channels or passes through the rapids: The course north or right of No. 62 or Goose island, called the *Indian Schute*, is the main channel, but it is not passable in times of high water. The course between Nos. 62 and 63, Rock and Goose islands, called the *Middle Schute*, is a safe and easy passage in all situations of the water above the middling stage. The pass between No. 63 Rock island, and the Kentucky shore, called the

Kentucky Schute, is lost in Rock Harbour, and is passable only in time of high water.

Near the bottom on the left side of No. 63 is a fine mooring place for boats, called *Rock Harbour*. It is opposite the upper end of Shippingport, and has water enough at all seasons for vessels of any burden.

No. 64, Sandy island, may be passed on the right in high water only. The left or south pass is the main channel. From No. 64, to No 63, is excellent mooring ground, and water enough for vessels of any tonnage.

The pass south of Corn island No. 61, and the Kentucky shore, is passable only in time of high water.

From the great danger in passing the Rapids, the courts of Louisville and Jeffersonville have been very careful to appoint experienced and trusty men as pilots, who can always be had at a moment's warning to conduct boats and vessels over them; and from a little ambition shewn by the pilots of both places to excel in their occupation, accidents, arising from the want of either skill or care, very seldom happen.

In levelling the descent of the Rapids, they have been found to be 22 1-2 feet in two miles, the distance from Beargrass creek to to the foot of the falls.

Two miles above the Rapids the river is deep, and three quarters of a mile broad; and in low water the channel is contracted to the breadth of 250 yards.

Clarkesville.

Is a small village immediately below the Rapids, situated on the north or right bank of the river opposite the elbow at Shippingport. Mill creek divides the town, and falls into the Ohio opposite No. 63 Rock island. Silver creek empties into the river just below Clarkesville.

Shippingport.

Is situated on the Kentucky side, at the foot of the falls and at the turn of the river to the left, about a mile and seven-eighths below Bear grass creek. Boats generally make a landing here after passing the Rapids.

Mr. James Berthoud, an enterprising French gentleman, the same that did so much at ship-building at Pittsburgh a few years ago, under the firm of *Turascon, James Berthoud & Co.* has established at Shippingport a SHIP YARD, where he carries that business on briskly; and from the excellence of the harbour, and the elegibility of the situation, it will no doubt be an useful establishment to the state of Kentucky particularly, and it is to be hoped advantageous to the proprietor.

See MAP 10, *page* 76.

Salt river, left side,	24¾	730
It is about 150 yards wide, and navigable 60 miles.		
Doe run, same side,	12	742
Blue river, right side,	20	762
Just above the mouth of this river are two islands,		

Nos. 65 and 66. The channel past the first is on the left side; past the second on the right, and keep close to the lower point of it.

Little Blue river,	12	774
No 67, Flint island and Harden's creek,	10	784

Here the channel is somewhat difficult—You must keep the island on the left, and hug it pretty close, and at its foot you go as if you intended to make the left shore, but after passing the lower point of the island in that direction, you must pull out quick towards the right shore to avoid an ugly sandbar lying to the left below the island.

Sinking creek, channel left shore,	10	794
Clover creek, same side,	10	804
Anderson's ferry, left side,	30	834
Hanging rock, right side,	10	844
Low Lands commence *(M. D.)*	17	861

The hills which are uniformly to be seen higher up the river either on the one side or the other, now entirely disappear, and there is nothing to be seen on either hand but an extensive level country.

(See MAP 11, *page* 77,*)*

Two islands Nos. 68 and 69,	15	876

Channel on the left side.

Yellow Banks, a creek, and island No. 70.	6	882
Two islands, No 71 & 72, go between them.	8	890
French island, No 73, channel left shore,	8	898
Three Mile island No 74, same side,	18	916
Green river, left shore, *(M. D.)*	9½	925½

This is a large water of Kentucky, and is navigable with a gentle current for about 150 miles. It rises in Lincoln county, and is 200 yards wide at its mouth.

Green river islands Nos. 75 and 76,	6½	932

Here are two islands opposite each other, one of which is six miles long, and has six or eight families settled on it; channel left side of both.

Red Banks,	25	957

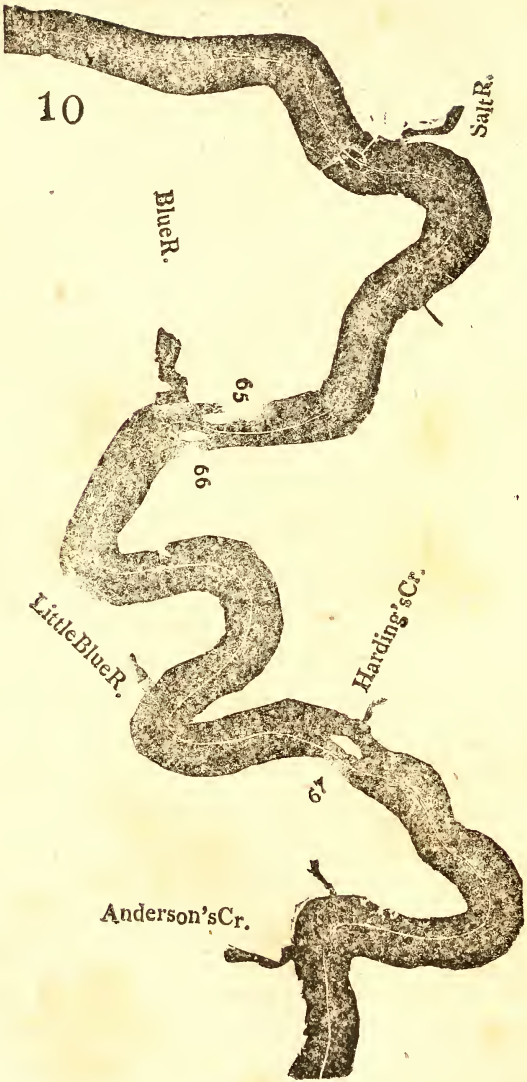
At this place which is included in Henderson's Grant of 200,000 acres, a town is laid off called

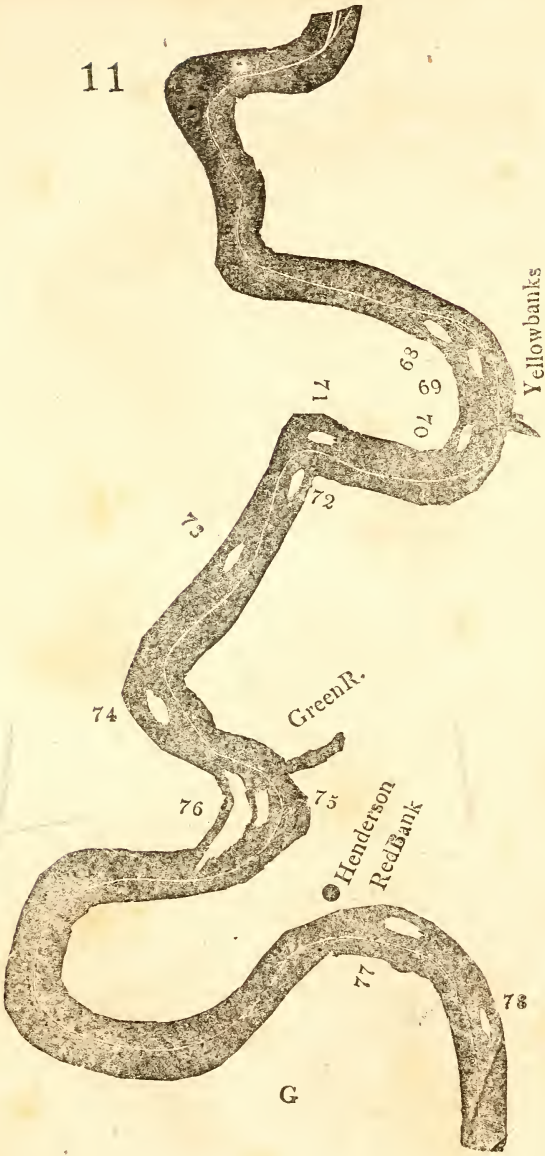
HENDERSON.

Owing to a remarkable bend in the river, though the distance from the mouth of Green river to this place by water is 25 miles, yet by land it is only called eight.

Red bank island No 77, channel right side,	4.	961

Half a mile below the head of this island, keep pretty close to it, to avoid a sand bar putting out from the


10
Salt R.
Blue R.
65
66
Little Blue R.
Harding's Cr.
67
Anderson's Cr.


11
Yellowbanks
63
69
70
71
72
73
74
Green R.
76
Henderson
Red Bank
77
78

G

right shore, and which extends 10 miles down ; at the head of the island is also a sand bar.

Diamond island No 78, channel right side,	22	983

This island contains several thousand acres of excellent land.

(*See MAP* 12, *page* 79.)

Straight island No 79, channel right side,	12	995
Slim island, No 80, channel same side,	8	1003
A large willow bar, or I. No 81, ch. same side,	3	1006
High Bank creek, left shore,	9	1015
Wabash river, and island No 82, *(M. D.)*	$7\frac{3}{4}$	$1022\frac{3}{4}$

Channel is on the right side of No 82.

This is a large navigable river of the Indiana Territory, formed by the junction of several branches, one rising within 9 miles of the Miami of lake Erie, another near the head of St. Joseph's river. On the former branch the town of VINCENNES, the capital of the territory, is beautifully situated, in a rich, level and delightful country. Vincennes is a thriving place, has a printing office, several mercantile stores, a post office, and about 100 houses. The principal trade is in furs and peltry. The winters are mild and the climate salubrious. In a direct line it is about 60 miles from the Red Banks on the Ohio. Lat. 38.° 51′. N.

The Wabash is in several places, interrupted by rapids, especially those between White and Deche rivers, called the Second and Third Grand rapids. About 28 miles above Ouitonon, a small French settlement on the north side of this river, a silver mine has been discovered. Salt springs, limestone, freestone, white and blue clay, are often met with in great abundance on this river.

When the waters of the Ohio are high, the banks of the Wabash are overflowed for several miles. It is about 400 yards wide at its mouth, and enters the Ohio at nearly right angles.

Brown's island No 83, channel left side,	$3\frac{1}{3}$	1026
Stevenson's island No 84, chan. right side,	11	1037
A small island No 85, channel left side,	3	1040
Saline river right side,	12	1052

Opposite the mouth of this river is a sand bar, channel left shore

Battery Rock, right shore,	6	1058
Trade water and island No 86,	1	1059

Channel right side of No 86.

Cave in Rock and island, No 87, *(M. D.)*	$6\frac{1}{2}$	$1065\frac{1}{2}$

Channel past No 87, is on the right side.

This is a curious cave, it presents itself to view a little above the level of the surface of the water when high, and close to the bank of the river on the right side, a

12
Wabash R.
80
81
78
83
High Banks
84
85
Trade Water
Saline R.
Battery Rock
86
Cave
87
88

little darkened by the shade of some trees which stand before its mouth. It is about 180 feet deep, and its mouth is of a semicircular form, about 80 feet at its base and 25 feet in height. The cave bears the inscriptions of the names of persons who have visited it at different times and the dates, &c.

Just below the cave is a sand bar on the right side, after passing this bar, is Walker's bar on the left side, channel close to the right shore for a short distance, thence turns across to the upper point of

Hurricane island No 88. 4½ 1070

This is one of the most difficult islands to pass in the Ohio—You pass it on the left side—But at the head of the island are two ugly sand bars one just above the other.—The first one lies pretty close to the left shore, and in a middling state of the water you may go between it and the [illegible] and with less danger of being aground on the island. The second bar lies in range with the island, and to avoid it in low water, you must keep the right shore pretty well until you are near the island, giving yourself time enough, however, to pull over for the left shore, keeping the foot of the bar on the left, and the head of the island on the right. The right side of this island is filled with rocks, snags and shoals. But in very high water you may pass it on the right side if you keep close to the right shore.

The current draws strongly to the right of the island, therefore use timely exertions to avoid either being drawn into that channel, or thrown on the head of the island.

(See MAP 13, page 82.)

Three Sisters, islands Nos. 89, 90, & 91, 30 1100

Pass the first on the right side, the second on the left, the third on the right.

Miles's ferry, just below first of Three Sisters,

Here the road crosses from Kentucky to Kaskaskias, St. Louis, &c.

Stewart's island, No. 92, channel right side, 8 1108

Cumberland islands, No. 93, 94, 95, & 96,

Channel left side of the first, then turn in between them: the lowermost of these islands is opposite the mouth of

Cumberland or Shawanee river, *M. D.* 10 1118

This river rises in the Cumberland mountains, on the confines of Virginia. Winding to a S. W. course, it advances into the S. W. territory; thence meandering a N. W. direction, passes by Nashville* into Kentucky,

* NASHVILLE, the capital of the state of Tennessee, is finely situated on the south side of the Cumberland river, about 190 miles

and unites with the Ohio in a west direction. It is 300 yards wide at its mouth, and is navigable for large barges up to Nashville, and for smaller crafts to the division line between that state and Kentucky. Ships of 300 and 400 tons burden have been built on the Cumberland river, and they can descend in times of floods of that tonnage from 200 miles above Nashville to the Ohio in safety, the river being free of obstructions and having a fine gentle current.

Eddyville, a post town of Kentucky, is situated on the Cumberland river about 45 miles above its mouth.

SMITHLAND,	3	1121

This town is on the left side of the river, about two miles and a half above the line between the states of Kentucky and Tennessee. It is dwindling away to nothing.

Tennessee or Cherokee river and island, No. 97, channel right side, *M. D.*	10	1131

This is the largest river that empties into the Ohio, is navigable up to the Muscle Shoals, a distance of 250 miles from its mouth, for vessels of considerable burden, from thence boats of 40 tons burden can ascend to the mouth of Holstien, thence up that river to Long Island, from which place to the mouth of Tennessee is reckoned 1000 miles. The paasage of this river through the Cumberland mountains is esteemed a great curiosity; ten miles above it is 1200 yards wide, yet at the mountains it is contracted to the breadth of 70 yards. This river rises in the Iron mountains, on the confines of South Carolina and Georgia, passes through Kentucky, and enters the Ohio in a N W direction, where it is 500 yards wide—The Muscle Shoals are 20 miles long and 3 broad, and are formed by a great number of small islands, which very much interrupt the passage except in high floods.

Fort Massac, right side, *(M. D.)*	11	1142
A large sand bar,	8	1150

In the middle of the river, channel right side.

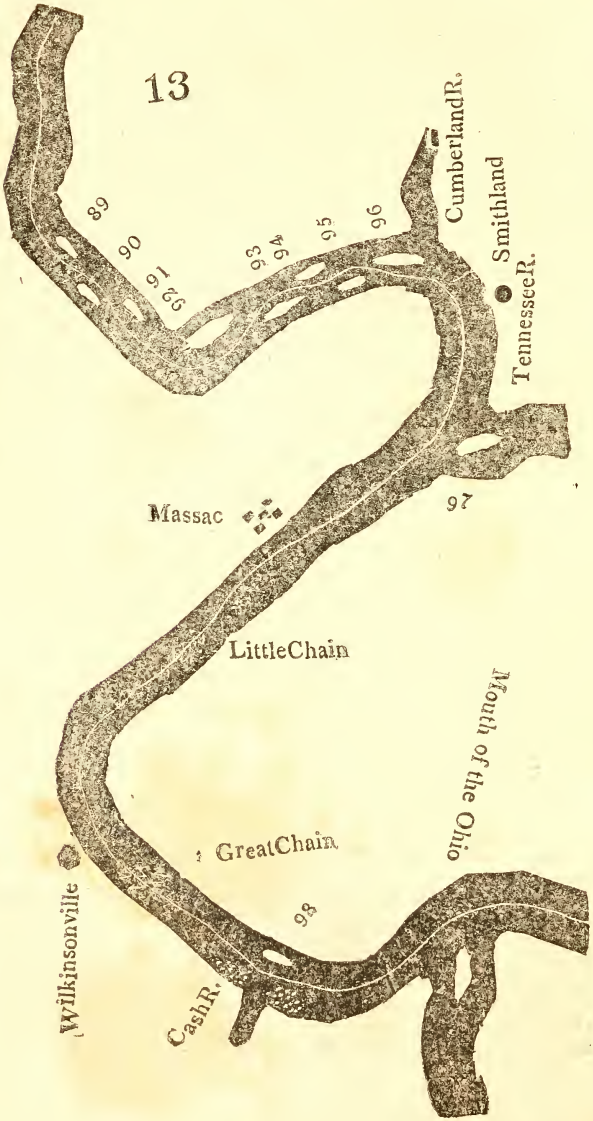
Little Chain of Rocks,	3	1153

Channel past these rocks is near the middle of the river.

Wilkinsonville, formerly called Cedar Bluffs,	12	1165

Channel three-fourths over from the right shore.

from its mouth, and 150 from Lexington, K. Its situation is on a high cliff of rocks about 200 feet above the level of the river. It contains about 160 houses, has 27 mercantile stores. The staple commodities are cotton and Indian corn. It is a lively place of business, and the inhabitants enjoy good health.


13
89
90
92 16
93
94
95
96
CumberlandR.
Smithland
TennesseeR.
97
Massac
LittleChain
Mouth of the Ohio
GreatChain
98
Wilkinsonville
CashR.

Big Chain of Rocks,	6	1171

Channel one third over from the left shore, until you are past the two last rocks in the middle of the river, then bear over to the right shore, to avoid a sand bar just below lying to the left.

Cash island, No. 98 and two bars,	9	1180

This island is on the left shore, the bars are on the right of it, the one runs down pretty close to the island, the other near the right shore, channel about midway between the bars, until you are half way down the island, then bear to the left, to clear a shoal lying to the right. This is the last island in the Ohio, and from thence you have good navigable water to the Mississippi, which you enter nearly in a S. E. direction.

Mouth of the Ohio river, *(M. D.)*	8	1188

You now enter the noble stream of Mississippi, where you will find the velocity of your boat considerably encreased by the additional body of water you swim in, and the prospect of the country much altered from that on the Ohio.

THE MISSISSIPPI RIVER.

THIS noble and celebrated stream, this Nile of North America, commands the wonder of the Old world, while it attracts the admiration of the New. From its mouth to where it receives the Ohio, is 1000 miles by water, but only 500 by land, passing through the Chickasaw country. From the mouth of the Ohio to that of the Missouri, is 230 miles by water, and 140 by land, from thence to the mouth of the Illinois river is about 25 miles.

The Mississippi is said to take its rise in the White Bear lake, lat. 48.° 16.′ N. long. 23.° 17.′ W. But the natives of the country say that it looses its name at the Falls of St. Anthony, lat. 45.° N. and above them, it assumes the name of Blue river, which is navigable 300 miles, making a distance of about 2580 miles from the mouth of the Mississippi, taking its meanderings.

The following are the principal rivers which empty into the Mississippi on the eastern side, from below the falls of St. Anthony to the mouth of the Missouri, with the distances from river to river, and how far they are navigable, viz. River St. Croix, 90 miles below the falls, said to be navigable 200 miles ; Sotoux, 60 miles further down, navigable 80 miles ; Buffaloe river, 15 miles, navigable 100 ; Black, 65 miles, navigable about 100 ; Ouiconsin river, 150 miles, navigable 200 ; Riviere a la Mine, 120 miles, navigable 50 miles, Riviere a la Roche, 210 miles ; Illinois, 160 miles, navigable about 450, and is 400 yards wide at its mouth.

Between a branch of the Illinois and the Chickago river, which empties into lake Michigan, there is a portage of two miles ; from this portage to the lake is a batteau navigation of 16 miles. By this happy connection of waters, there is a complete communication from New York to New Orleans, through that northern and extensive route, having only about 28 miles land carriage, in the distance of nearly 4000 miles, the greatest stretch of inland navigation, perhaps, known in the world.—This route from New York, is by the Hudson river to Albany, thence by land to

Schenecktada 16 miles, thence up the Mohawk river, and through a canal of four miles into Wood creek, thence into lake Ontario, and up that lake and Niagara river to Queenstown, 7 miles below the falls of Niagara; thence 10 miles land carriage round said falls to Chippaway, thence up the river into lake Erie, and through that lake into lake St. Clair, thence into lake Huron, through lake Michigan, and into the Chickago river, mentioned above, thence down the Illinois and Mississippi rivers.—This route comprehends the most extensive channels, and gives a wide scope to trade in general, and may one day be made a very profitable use of to individual citizens, as well as highly advantageous to the trade and commerce of the United States, especially if they get possession of the Northern Fur Trade, now carried on by the British.

The country of the Illinois is perhaps not exceeded in beauty, levelness, richness, and fertility of soil, by any in the United States, nor perhaps in the world. Its appearance is truly delightful, and some are of opinion that this is the spot that is called by some French writers "*The terrestial Paradise.*" It yields great quantities of grapes, from which the inhabitants make a very good red wine for their own consumption. Coal mines, and salt ponds, 100 yards in circumference, are found on the Illinois river; and on a branch of it, an allum hill has been discovered; there are also appearances of copper. It yields red and white cedar, pine and mulberry; indigo, tobacco, hemp and flax are raised to advantage; the sugar and fruit trees flourish admirably; and some dying and medicinal plants are found.

The French used to get their mill stones about 250 miles up the Illinois. There are several beautiful lakes near its borders, and one 210 miles from the Mississippi, called the Illinois lake, is 19 miles and a half in length, and three in breadth, it contains great plenty of fish, particularly the Sturgeon and Picannau. The Illinois has a number of rivers emptying into it, and some of them large, and navigable for 150 miles. The river Michilimackinac which enters it about 190 miles from the Mississippi, is navigable 90 miles, and has at its mouth 30 or 40 islands, which at a distance look like a small village. The banks of the Illinois are high and the water clear, and at the bottom of the river are white marle and sand.—It has a number of islands in it,

some of which are 10 miles long. The Prairies or extensive meadows abound much on and near the Illinois river; these yield fine large grass and small shrubbery. A Fleche or arrow stone is found on this river, from which the Indians make their gun flints and point their arrows.

Twenty five miles below the Illinois, the Missouri joins the Mississippi on the W. side. It is in fact the principal river, contributing more to the common stream than does the Mississippi, even after its junction with the Illinois. It is remarkably cold, muddy and rapid. Its overflowings are considerable. They happen during the months of June and July; and on account of their commencing later than those of the Mississippi, it is thought that the sources of the Missouri are northward of those of the Mississippi.—Traders go up the Missouri 2000 miles, and for that distance its waters are unbroken with any considerable rapids.*

The Mississippi, below the mouth of the Missouri, is always muddy, and abounding with sand bars, which frequently change their places. It carries 15 feet water to St. mouth of the Ohio, to which place it is about one mile and a half wide. The current is too powerful to be stemmed by the force of the wind alone, acting upon sails.—Barges, and keel boats, however, may ascend by being rowed or poled: a sail is sometimes of considerable help, and gives ease to the hands.—During the floods of the Mississippi, which are periodical like those of the Nile in Egypt, the largest vessels may descend, if care be taken in the steerage, keeping them off the islands which are numerous. These floods begin in April, and the river returns into its banks early in August. Its overflowings or inundations extend further on the western than on the eastern side, covering the lands in some places, 50 miles from its banks. Above the mouth of the Missouri, it resembles the Ohio, like it clear, and gentle in its current, not quite so wide, the period of its floods nearly the same, but not rising to so great a height.—This river yields turtle of a peculiar kind, perch, trout, gar, pike, mullets, herrings, carp, spatula-fish of 50 lb. weight, cat-fish of 100 lb. weight, buffaloe fish, and sturgeon. Alligators or crocodiles have been seen as high up as the Arcansas. It also abounds

* For a more particular account of the Missouri, See Appendix.

in herons, cranes, ducks, brant, geese, and swans; and its margins are not wanting in music, from a great variety of the "sweet songsters of the wood."

Fifteen miles below the mouth of the Missouri, St. Louis is pleasantly situated on the western bank of the Mississippi, 215 miles by water, and 125 by land above the mouth of the Ohio. It stands on a high piece of ground, and is the most healthy and pleasant situation of any known in this part of the country. St. Louis was first settled by a few French settlers from the east side of the river, about the year 1765. The country falling into the hands of the Spaniards by conquest from Britain, it remained in their possession until that government gave it up to France by the treaty of 1800 and 1801; from whom it passed by right of purchase dated 30th April 1803, into the hands of the government of the United States, and was regularly taken possession of on the 20th Dec. 1804. It is the seat of territorial government for Upper Louisiana; contains about 200 dwellings, several mercantile stores, a post office, and is now fast encreasing in population, buildings, and business generally. It has also a printing office issuing a weekly gazette. The fur and peltry trade of the Missouri and Mississippi rivers principally centres here. It is in lat. 38° 55′ N. and the climate may be compared with that of Maryland and Virginia between 37° and 39° N. Latitude.

Cahokia, a small village, is situated 4 or 5 miles below St Louis, on the east side of the Mississippi, and one mile up a small river. About 45 miles lower down is the village of St. Philips. Fort Chartiers is 4 miles still further down. The village of Kaskaskia, 12 miles below Fort Chartiers is situated 5 miles up a river of the same name, which joins the Mississippi on the east side, about 90 miles above the mouth of the Ohio. The village of St. Genevieve or Missire, is situated on the western bank of the Mississippi, nearly opposite Kaskaskia village; in 1773, it contained 100 houses, and 460 inhabitants; this and St. Louis, were the only towns on the western side of the Mississippi at that period.—Four miles below St. Genevieve, on the same side with it, at the mouth of a creek, is a Hamlet, called the Saline. Here a vast quantity of salt is made, which can be afforded at about one dollar per bushel at the works.

A few miles westward of St. Genevieve are several lead

furnaces, which make a large quantity of lead. They sell it at the furnaces, from three to four cents a pound.—The lead mines in this part of the Mississippi country are very numerous, and when the settlements can afford them to be worked to their full extent, they must yield a vast revenue to the government of the United States.

The ridge which forms the eastern bank of the Mississippi, above the Missouri, continues northerly to the Illinois river; where, from its summit, you have a most delightful prospect of the Mississippi river for 20 miles; and also of the beautiful meanderings of the Illinois for many leagues—Next presents itself to view, a level and fruitful meadow, of at least 100 miles in circuit on the western side of the Mississippi, watered by several lakes, and shaded by small groves or copses of trees, scattered in different parts of it, and then the eye, with rapture, surveys, as well the high lands bordering upon the river Missouri, as those at a greater distance up the Mississippi.

The fork or point of land formed by the junction of the Ohio with the Mississippi, is about 20 feet higher than the common surface of the river, yet the spring floods overflow it for several weeks. The point is remarkably rich, having the mud of the rivers deposited on it yearly; and it yields in its natural state pea-vines, grass, &c. and in particular, the aspen-tree of an unusual height and thickness.

The current of the Mississippi runs at the rate of about $3\frac{1}{2}$ to 4 miles an hour; when very high, something faster. From the mouth of Ohio downwards, it carries from 25 to 60 feet water, and from a mile and a quarter, to two miles in breadth. From the warmth and muddiness of the water, it is rendered a disagreeable drink to navigators. By filling stone jars with it over night, it becomes cool and clear, and is rendered more palatable. The waters of the Mississippi are said to contain medicinal qualities, having performed cures for most cutaneous diseases, operating on some as a powerful cathartic, and as a purifier of the blood.

The principal rivers which empty into the Mississippi below the mouth of the Ohio, are: Wolf and Yazoo rivers on the left side; rivers St. Francis, White, Arkansas, Red or Riviere Rouge, on the right. These will be more particularly noticed as we descend.

Among the fowls of this river, especially pretty low down, the Pelican are very numerous.*

After you enter the Mississippi you begin to wind considerably to the southward, and sometimes east of that point. The climate becomes mild and warm, and the winter gives but a trifling check to the growth of vegetation.—The banks of the river, especially below Natchez, are lined with groves of orange trees, whose delightful fragrance, and the beautiful appearance of their flowers, added to the prospect of getting the fruit plentifully, has a charming effect on the feelings, and seem to form a temporary compensation to the wearied navigator, for the many inconveniences he experiences, and the toils and hazards he may have undergone since his embarkation.

The cotton wood tree also grows in great abundance on the banks of the Mississippi. This tree on examination has been found to be the same with the lombardy poplar, though some doubt its identity.

The waters of this river are kept in their proper channel, below Batton Rouge to New Orleans, by artificial banks, called the Levee, on which are erected a number of saw mills, which are turned by a sluice being cut through the bank or levee, and the water gushing forth and falling upon the wheel, turns it with great velocity. There being no tail-race, the water expends itself through the flat and swampy country below.

* The Pelican is a very large bird, not unlike the swan in shape or colour; but what renders it particularly singular among the feathered tribe, is its enormous bag or pouch which hangs under its long bill. This is large enough to hold four or five gallons of water; they use it principally however, as a reservoir for the fish they catch, either for their own food, or that which they intend to carry to their young.—The pelican is said to have a melancholy countenance, is very torpid, and to a great degree inactive, so much so, that nothing can exceed its indolence but its gluttony, and that hunger is the only inducement it has to rouse from its stupid sleep —It is asserted that they seem to be fond of music.—They are long-lived, and capable of being domesticated. History informs us that the emperor Maximilian had a tame pelican about 80 years. Their flesh is too coarse to be eaten. Their pouches are frequently dried and converted into bags or purses, for the use of the ladies. The pouch of this bird is said to have given rise to the fabulous story among the ancients, that it fed its young with blood from its breast.

Instructions and precautions, necessary to be attended to in navigating the Mississippi river.

THE hints we have already given respecting the precautions necessary to be observed in descending the Ohio, will in some particulars apply to the Mississippi.—But there being a considerable difference in the nature of these rivers, a difference of management, and a greater degree of circumspection, labour, and watchfulness, will be found absolutely necessary.

The boats intended for the Mississippi must be much stronger in their timbers, and more firmly built than those for the Ohio only.—They ought also to be caulked better, and much higher all around, better roofed, and have a longer and stronger cable ; and it would be well, if proprietors can afford it, instead of taking along side a canoe, to procure a kind of long boat, that would carry, in case of a shipwreck, a leek, or other accident, 20 or 30 barrels of flour or whiskey. This provision might sometimes perhaps be the means of saving a part of a cargo, and the boat would sell at Orleans, if well and neatly made, for as much as it might cost at Pittsburgh, or any other place where they could be purchased.

The following observations point out the principal impediments, and the most imminent dangers attending the navigation of the Mississippi :

These are, 1st :—The instability of the banks.

2. Currents called bayous, rushing out of the river in a state of its high waters ; and,

3. Planters,¶ sawyers, and wooden islands.

¶ Planters, are large bodies of trees firmly fixed by their roots in the bottom of the river, in a perpendicular manner, and appearing no more than about a foot above the surface of the water in its middling state. So firmly are they rooted, that the largest boat running against them, will not move them, but they frequently injure the boat.

Sawyers, are likewise bodies of trees fixed less perpendicularly in the river, and rather of a less size, yielding to the pressure of the current, disappearing and appearing by turns above water, similar to the motion of a saw-mill saw, from which they have taken their name. They sometimes point up stream as well as down.

Wooden islands, are places where by some cause or other, large quantities of drift wood, has through time, been arrested and matted together in different parts of the river.

We shall endeavour to instruct the unexperienced navigator how to avoid them. The instability of the banks proceeds from their being composed of a loose sandy soil, and the impetuosity of the current against their prominent parts (points,) which, by undermining them unceasingly, causes them to tumble into the river, taking with them every thing that may be above. And if, when the event happens boats should be moored there, they must necessarily be buried in the common ruin, which unfortunately has sometimes been the case. For which reason, navigators have made it an invariable rule never to land at or near a point, but always in the sinuosity or cove below it, which is generally lined with small willows of the weeping kind, whence some call them although improperly, willow points, and which being generally clear of logs and planters, the landing is easily effected, by running directly into them, the resistance of the willows destroying a part of the boat's velocity, and the rest is overcome without much exertion by holding fast to the limbs which surround you. In those places the river generally deposits the surplus of soil, with which it is charged from the continual cavings of the points, and so forms new land on one side, by destroying some on the other.

The banks of this river from where it receives the Missouri to its mouth, being with a few exceptions below high water mark, an immense country is inundated, when the river is in its highest state, by which those extensive swamps are formed and supplied, which prove the nurseries of myriads of musquitoes and other insects (to the no small inconvenience of the traveller) and the never failing source of grievous diseases to the inhabitants. There are also streams, which at all times sally forth from the main river with astonishing rapidity, and whose vortex extends some distance into the stream. Boats once sucked into such bayous are next to lost, it being almost impossible to force so unwieldy a machine as a flat bottomed boat against so powerful a current. It will therefore be safest for boats never to keep too close to shore, but to keep some distance out in the river. To avoid planters and sawyers requires nothing more but attention, for they always occasion a small breaker wherever they are, and if your boat seems to be hurried towards them, pull from them quick,

else if you are dilatory you must abide by the consequence.

Wooden-islands, are more dangerous than real ones, the former being an obstacle lately thrown in the way of the current, and the bed of the river not having had sufficient time to form that bar or gradual ascent from the bottom of the river to the island, which divides the current at some distance from the point of the island above water, the current will hurry you against them, unless you use timely exertion. From all this it must be evident how imprudent it is attempting to go after night, even when assisted by a clear moon ; but after you are once arrived at Natchez, you may safely proceed day and night, the river from that place to its mouth being clear, and opposing nothing to your progress but a few eddies into which you may occasionally be drawn and detained for a short time.

The islands of the Mississippi are numerous and many of them large, and from their being generally situated in the bends of the river, they become more difficult and dangerous to pass. We have been sedulous, however, in giving such descriptions of them, and pointing out the method to avoid them, as we hope will be found highly useful, and render the danger much less, thereby affording a considerable security to the cargo, and ease to the mind of the navigator.

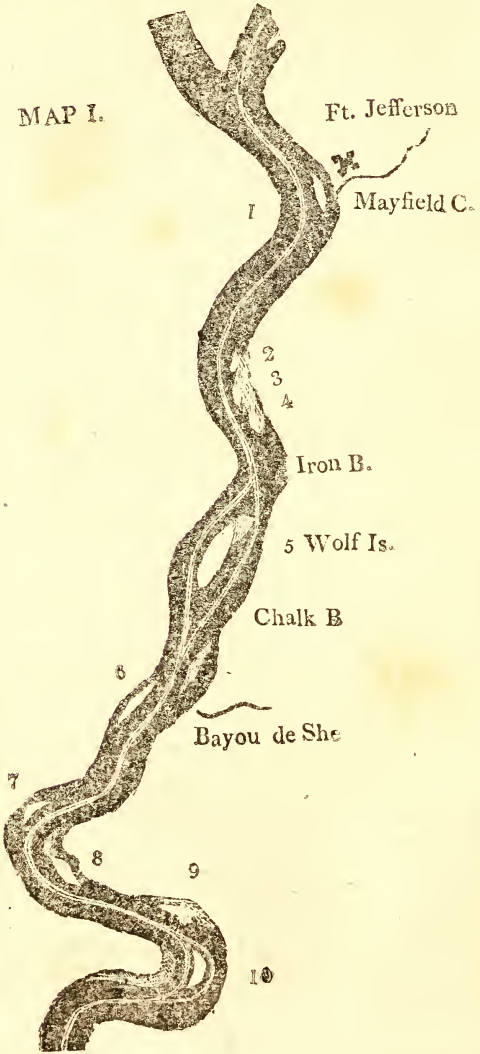
The principal islands are numbered, together with such descriptions of their size and situation, as cannot easily be mistaken ; and by recurring to the Maps, you will find them represented by white spots, with their numbers opposite them. The sand bars are less white and cross-barred ; and the channel is pointed out by a double white line, which in some few instances may be found contrary to the direction given in print, arising from the difference of opinion among navigators themselves :—Where this is the case, we advise that the printed directions should be followed in preference to the line on the map.

The distances are taken from the head of one island or sand bar, to the head of those next below them, including the supposed length of each, which measurement, (being principally by the eye and running of the boat) is carried out to the column of totals, to make out the general distance as correct as possible.

OF THE MISSISSIPPI,
ITS CHANNELS, ISLANDS, SAND-BARS, FORTS, BAYOUS, RIVERS, CREEKS, SETTLEMENTS, TOWNS, CITIES, &c.
And the distances from place to place.

ISLAND No. 1, below the mouth of Ohio,	5	5
Lies very close to the left side of the river, opposite it, also on the same side, stands Fort Jefferson, immediately above the mouth of Mayfield creek. No. 1 is about one mile long.		
Channel, in all stages of the water, is on the right shore.		
Islands, Nos. 2, 3 & 4, 10 miles below No. 1,	11	16
Lie nearest the left shore, and must be passed on the right; they are small and lie just below one another.		
Iron Banks, on the left side,	4	20
Here let your boat drift near the banks, and immediately below them you must hug the left shore so as to clear a large sand bar putting out from the upper end of		
Wolf I. No. 5, *(See MAP 1, page 94.)*	4	24
This is a large island nearly in the middle of the river, about five miles long, in common floods both sides are navigable, the left is the best, and three miles nearest.		
Chalk Banks begin at the head of No. 5.		
Sand bar, two miles below No. 5,	7	31
This bar is 200 yards from the left shore, in high water it is covered, the channel is right of the bar, it is about one mile long.		
Island No. 6, two miles below the bar,	3	34
Lies nearest the right shore, and is about two miles long. Channel left of the island. Opposite this island, and on the left shore		
Bayou de She empties in.		
Island No. 7, four miles below No. 6,	6	40
Lies close to the right shore, in the upper part of a bend, it is a large willow island about three miles long, channel left shore in all situations of the water.		
Island No. 8, a mile below No. 7,	4	44
Lies near the middle of the river, and opposite a point on the left shore, it is large, and about four miles long, best channel is on the right, the left side may be navigated in floods and is much nearer.		
Island No. 9, three miles below No. 8,	7	51
Lies very close to the left shore, channel is on the right in all stages of the water, it is about three miles long.		

THE JUNCTION OF THE OHIO AND MISSISSIPPI.



Island No. 10, three miles below No. 9,	6	57
Is tolerably large, about one mile long, and lies nearest the left shore, the river turns short to the right.—At the head of No. 10, is an ugly sand bar; in low water, you must hug the left shore pretty close around the bend, keeping both the bar and the island to your right. In high water, the right pass may be gone, providing you hug the right hand shore, keeping off the island; it is something nearer than the left channel. The pass between the bar and the island is extremely dangerous.		
New Madrid, 12 miles below No. 10,	13	70
About 20 years ago Col. George Morgan, formerly of New Jersey, now of Washington county, Pennsylvania, in company with several other gentlemen, laid out a town here on a large scale, which they called New Madrid. It contains but a few houses, and is situated in a beautiful tract of land on the right bank of the river, in lat. 36° 30′ N. Just above New Madrid a creek puts in, and to effect a landing here, you must keep to the outer edge of the counter current until you are below the mouth of the creek, then by pulling into the lower point of the eddy you can make a landing with safety and ease, and the nearer you land to the mouth of the creek the better, for opposite the town the bank is high and continually falling in.		
Island No. 11,	5	75
Is on the right side, and close to the upper end of a bend, channel is on the left shore, it is about 2 miles long.		
Island No. 12, about 2 miles below No. 11,	4	79
Pass this island on the right side, it is about two miles long.		
A sand bar below No. 12, about three miles,	5	84
Channel good on both sides, this bar is nearly a mile in length.		
Island No. 13, about 3 miles below the bar,	4	88
It lies near the left shore, channel on the right shore, it is about three miles long.		
Island No. 14, nearly one mile below No. 13,	4	92
Is on the right side, and on the left side of it are four or five willow islands, take the left side of these islands in all stages of the water; in very low water a sand-bar which joins them makes its appearance; these islands are about three miles long, with drift wood on their points.		
Island No. 15, better than 2 miles below 14,	5	97
Is pretty large, lies close to the left side, take the right channel at all times; it is about three miles long.		
Little Prairie, about 3 miles below No. 15,	6	103

There is a small settlement on the right bank of the river about two miles long.		
Island No. 16, 2 miles below the last house,	4	107
It lies very close to the right side of the river, and opposite it on the left side is another small		
Island No. 17,		
Take the left side of both, except in high water, when you may go between them; No 16 is about 5 miles long.		
Island No. 18, one mile below No. 17,	6	113
Lies close to the right shore; opposite the upper end of No. 18, on the left, is a bar, may go on either side of the bar, but next the island keeping it to the right is the best and nearest. No. 18 is about three miles long.		
Island No 19, opposite the middle of No 18,		
And extends one mile below it, lies close to the left shore, channel on the right or between them.		
(See MAP 2, page 97.)		
Island No 20, just below No 19,	4	117
Is on the left shore, pass it on the right, it is about two miles long.		
Island No 21, is opposite lower point of 20,	2	119
Lies near the middle of the river, channel on the right, but in floods the left side may be gone and is nearest, it is about three miles long.		
Island No 22, 1 mile below 21,	4	123
It lies in the same range with the above, pass it on the right, though in high floods you may go on either side, it is about two miles long.		
Island No 23, nearly a mile below 22,	3	126
You may take the left in high but the right side in low water is best, it is about one mile and a quarter long.		
Island No 24, is $\frac{3}{4}$ of a mile below 23.	2	128
Lies close to the left shore, pass it on the right in all stages of the water, as well as 19, 20, 21, and 22, these last six islands surround one point; 24 is about one mile and an half long.		
Bayou river, half a mile below No 24,	2	130
Is about fifty yards wide at its mouth, enters on the left bank.		
Three or four Willow islands, about a mile below Bayou,	1	131
These are small and lie on a very large sand-bar joining the right shore, channel on the left; they are nearly two miles long.		
A sand-bar one mile below the Willow Is.	3	134
This bar is large and covered with willows, and joins the left shore, it is about a mile long; pass it on the right.		

MAP II.

12
N. Madrid
11
14
13
Little Prairie
18
16
15
19
20
17
21
22
23
24
Bayou R
25
L. Reach
26
27
28
29

Island No 25, six miles below the bar, 7 | 141
Lies near the middle of the river, channel good on both sides, is about two miles long; from this island you have a beautiful view of the

Long Reach, which is 10 miles in length.

Island No 26, three miles below 25, 5 | 146
It is about three miles long, and lies near the left shore; immediately below commences

Island No 27, still nearer the left shore, 3 | 149
This is a large island, about four miles long; pass both these islands on the right, according to the white line in Map 2, page 97.

Island No. 28, about a mile below 27, 5 | 154
This is a willow island, about two miles long, lies close to the right shore, pass it on the left side.

Island No 29, is opposite the middle of 28,
It is small and lies close to the left shore, pass it on the right; it reaches perhaps half a mile below No 28.
The river at the lower end of Long Reach turns to the right, and here you have another Reach of about nine miles long, and a beautiful view of the river for that distance.

(See MAP 3, page 100.)

Island No 30, half a mile below 29, 3 | 157
Is about two miles long, lies nearest the left shore, pass it on the right. At the lower point on the right side is a large sand bar.

Island or Sand-bar, No 31, 2 miles below 30, 4 | 161
This island is very narrow and lies very close to the right shore; you must take the left side of it at all times. Opposite the head of No 31, is a sand-bar; you can go on either side of it, but the left side is the best. It is about three miles long.

Island No 32, 2 miles below 31, 5 | 166
Is a large and high sand island with some willows and drift-wood upon it, lies close to the right side in a bend. You can pass on either side of No 32. If the water be high, you may take the right side, and keep pretty close to the first right hand point, in order to take the right side of No 33, which is safe. But if the river be low, you must take the left side of No 32, in order to take the left side of a bar opposite the first right hand point; and likewise take the left side of No 33.—No 32, is about two miles long.

Flour island, No 33, 6 miles below 32, 8 | 174
Is near the middle of the river, which bends much to the right. You must take the left side of this island in low water; when the water is high, you can go on

either side. Just above No 33, is a large sand-bar; to avoid it, you must, in low water, keep it on the right, and hug the left shore pretty close, which will render the passage easier round the island. If you are unfortunately drawn into the right channel, keep as near the right shore as possible, and prevent yourself from being thrown on the side of the island to which the current sits powerfully, and which is filled with dangerous snags, sawyers, &c. No 33 is about one mile and a half long, and is said to take its name from flour-boats having got wrecked upon it.

Upper Chickasaw Bluffs, on the left side, 2 | 176

They begin at the lower point of No. 33, and continue down about a mile.

Island No. 34, 3 miles below 33, 4 | 180

Lies about the middle of the river, and is nearly four miles long. In low water, you must take the right side of this island. There are two small islands close to No. 34, which may be considered a part of it, and the navigator must never attempt to go between them and the large one. A small outlet makes out on the left shore nearly opposite the middle of 34.

Second Chickasaw Bluffs, 3 miles below 34, 7 | 187

These are on the left shore, the river turns short to the right, and is very narrow, you may suffer your boat to drift as near them as you think is safe.

Island No. 35, about 3 miles below 2d Bluffs, 3 | 190

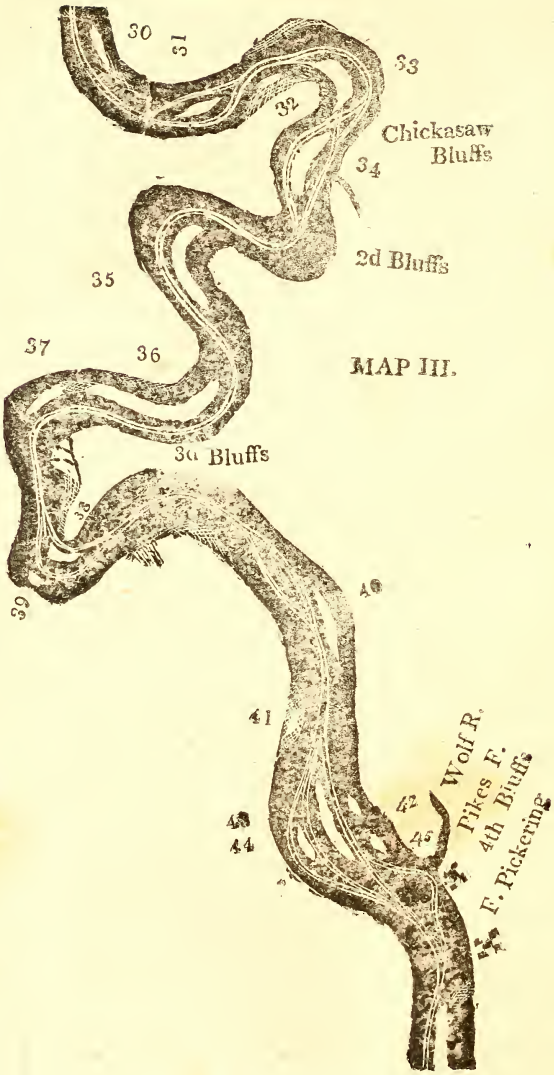
Lies nearest the left shore, in floods the left passage is good and about three miles and a half the nearest, in low water the right channel must be taken. This island is about six miles long.

Island No. 36, about 2 miles below No. 35, 8 | 198

Lies near the middle of the river, is about eight miles long, opposite it on the right bank, is what is called the *Devil's Race Ground.* Navigators differ about the safety of the channels past this island: Some recommend the right pass in low water, which is now much better than it was a few years ago, and much wider than the left, and 4 or 5 miles the nearest; and if taken, the right point must be hugged pretty close, in order to keep off the island, which is full of sawyers and dangerous snags, and to which the current draws powerfully. If the left pass be taken, which seems to be most approved of, you must keep pretty close to the left shore at the head of the island. Near the shore and on the left of the island is a sand bar. About two miles below the head of the island you come to the

Third Chickasaw Bluffs, left shore,

Which are not difficult to pass, and are about three quarters of a mile in length.


30
31
33
32
Chickasaw Bluffs
34
2d Bluffs
35
37
36
MAP III.
3d Bluffs
39
40
41
Wolf R.
Pikes F.
4th Bluffs
42
43
44
45
F. Pickering

Island No. 37, 2 miles below 36, 10 208

Is a willow island, lies near the right shore, and is united to No. 36, by a bar; channel on the left shore, but not too close to it, for fear of being sucked into one of the three out-lets which run out from the left shore about a quarter of a mile below each other, and nearly opposite the lower point of No. 37. These three out-lets unite and return into the river about five miles below.—No. 37 is about two miles long, and the out-lets one mile from the first to the third. Some navigators say that the right side of No. 37 ought to be taken at all times; and if the water be low, keep pretty close to a bar that puts out from the right shore.

A willow Beach and Sand bar, 3 211

Just below the out-lets, and on the same side; here the river bends short to the left, and as the bank is low, the current draws strongly to the right shore. Some care is necessary to prevent your boat from being drawn into the channel to the right of No 39, about 3 miles below the last outlet. About one mile below and on the right side may be found pretty good landing along a willow shore.

Island No. 38, 3 miles below last out-let, 3 214

Lies nearest the left shore. Here are three passages in consequence of another island, No 39, lying to the right of No 38, the middle channel is preferred in all stages of the water, the one to the right of No 39 is seldom gone, it being about ten miles round, and the one to the left of No 38 is only navigable in high water, when the current is remarkably rapid, channel narrow and dangerous, it is better than a mile through. The navigator in taking the middle pass must take care to hug the left side of No 38 and a bar adjoining, to avoid being driven against No 39. The river at this place makes a sudden turn to the left, and is said to be the greatest bend between the Ohio and New Orleans. It is called the Devil's Elbow. No 38 is about 2 miles long.

Twelve Out-lets, nearly a mile below 38, 4 218

These are small, and on the right shore.

A Sand and Willow Beach, one mile below, 1 219

It joins the right shore; on this beach are large quantities of drift wood and rafts; it is about two miles long.

Island No. 40, 2 miles below the Beach, 4 223

Lies nearest the left shore, take the left side of this island in low water. About half a mile below the head of No 40, is a small island middling close to the right shore, take the left side of it, and about a mile below on the left shore, there is a large sand bar, take the right side of it. No 40 is about 4 miles long.

Island No. 41, 2 miles below 40, 6 229

It lies near the right shore, and adjoining it is a bar, channel on the left of both. No 41 is nearly a mile long.

Islands Nos. 42, 43, 44 & 45, 3 miles below, 4 233

Lie in a bend of the river, the two nearest the left shore, viz. No 42 the upper, and the other No 45, the one to the right of these is the largest, No 43, and the one nearest the right shore is No 44. On the right side of the island next to the right shore is a sand bar, take the right side of it, as well as of all the islands in low water—In high water any of the passes may be gone in safety—From the head of the first to the foot of the last is about six miles.

Wolf river, 1 mile below No. 45, 7 240

This is but a small river, entering on the left shore. Opposite Wolf river on the right side of the Mississippi, is an old Spanish Fort, now nearly demolished—A short distance below this river stands

Fort Pike,

Here a good landing may be effected by pulling over towards the left shore immediately after you pass the four islands.

Fourth Chickasaw Bluffs commence here,

Which are about 2 miles long, at the foot of which is

Fort Pickering, two miles below Pike, 2 242

This fort was erected some time after that of Pike. Fort Pickering is an eligible situation for a garrison, as it occupies the commanding ground of the fourth Bluffs. The fort stands on the left side of the river, in the Mississippi Territory—The United States have a factor here, but the settlement is very thin; it generally consists of what is called the half breed, which is a mixture of Indians and whites.

(See MAP 4, page 103.)

Island No. 46, about 1 mile below, 1 243

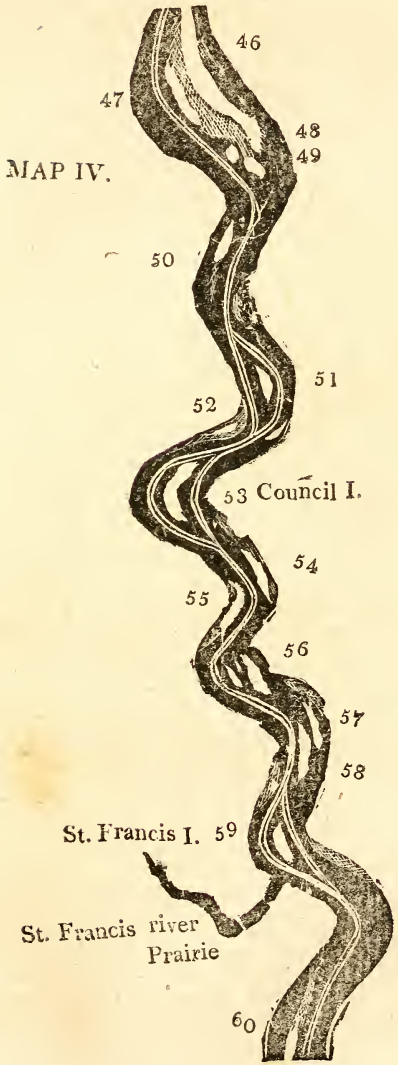
Lies nearest the left shore, the left passage, as well as the one between this and No 47, is good in high water and much the nearest, but the right of both must be taken when the water is low; No 46 is about 11 miles long.

Island No. 47, opposite 46,

is small and lies on the right side—At low water a c. of rocks may be discovered extending from the head of No 46 to the left shore.

Islands Nos. 48 and 49 are to the right and opposite the foot of No 46.

The right side of these two islands must be taken in all situations of the water; on the right of No 49 and


46
47
48
49
MAP IV.
50
51
52
53 Council I.
54
55
56
57
58
St. Francis I. 59
St. Francis river
Prairie
60

adjoining it is a sand bar—Nos 48 & 49 are 2 miles long

Island No 50, 2 miles below 49, 4 253

It lies pretty close to the right shore, channel left side ; it is about two miles long.

A Sand bar, 3 miles below 50, 5 263

This bar is about one mile long, lies nearest the left shore, take the right side, and when the water is low keep pretty near the bar, so as to take the left side of

Island No. 51, 2 miles below, 3 266

Lies near the middle of the river, the right side is something nearest, and is safe in a middling state of the water ; it is about three miles long.

A Willow island, between 51 & 52,

Lies close to the left shore.

Island No. 52, 4 miles below 51, 7 273

Is a large willow island, about three miles long, lies close to the right shore, channel on the left side.

Council Island, No. 53, 1 mile below 52, 4 277

Lies near the middle of the river, take the left side of this island at all times—One mile below No 53, is an out-let, just below which is a good landing around a small point—About half a mile below this point, is a small sand bar a little distance from the right shore ; the left side of it is the best channel—The river here turns short to the left; No 53 is about 4 miles long—The bends of the river from this to St. Francis river are particularly full of snags, &c. and the current is very rapid.

Out-let, 1 mile below 53, 5 282

This out-let is on the right side, and is small.

Island No. 54, 3 miles below the out-let, 3 285

Lies nearest the left shore, channel right side, in floods the left side may be gone in safety ; about half a mile below the head of No 54, and about one fourth from the island, is a large sand bar ; best channel is on the right side of it also—It is about three miles long.

Island No. 55, opposite lower point of 54,

On each side of this island is a channel in all stages of the water, and that on the left must invariably be taken ; the right being the most formidable and dangerous between the mouth of Ohio and Orleans ; in approaching it the navigator must use more than common caution, as the right channel takes the greatest part of the water, and the draught into it extends full half way across the river ; it takes off likewise at right angles, and is not seen till you are very near it ; so that a boat is often drawn into the centre of its current (which is a very powerful one) before even the island is discovered, from whence a retreat is impossible, and nothing but great address on the part of the boatmen can save them from

destruction; the only method to avoid this is to keep well over to the opposite shore for some distance before you expect it—Just above this island is a willow bar, which keep on the right.

Island No. 56, 2 miles below 55, 6 | 291

Here are three islands pretty close to the left shore, but in low water they have more the appearance of one than three, therefore we include them all in No 56, the right side is the principal channel, they are about three miles long—About a quarter of a mile above the foot of the last of these islands, in the bend on the right shore, around a small point, is a tolerable good landing.

Island No. 57, 3 miles below 56, 6 | 297

This is a small willow island, lying near the middle of the river—Channel left side in low water.

Island No. 58, lies close to the right shore,

And a little below the upper point of No 57, and extends about two miles below it; the left side of both these islands is to be preferred in low water; the pass is pretty good between them—In a bend on the left shore and above these islands, is a large sand bar.

St. Francis Island, No. 59, 3 miles below 58, 8 | 305

This island lies in the middle of the river, is large, channel is good on both sides, the left is the best and nearest, current is very rapid; it is about three miles long—Just below the foot of No 59, on the right side,

St. Francis' river empties in on the right,

This is a handsome river, about 200 yards wide at its mouth—Its current is very gentle, and is said to head near St. Louis.

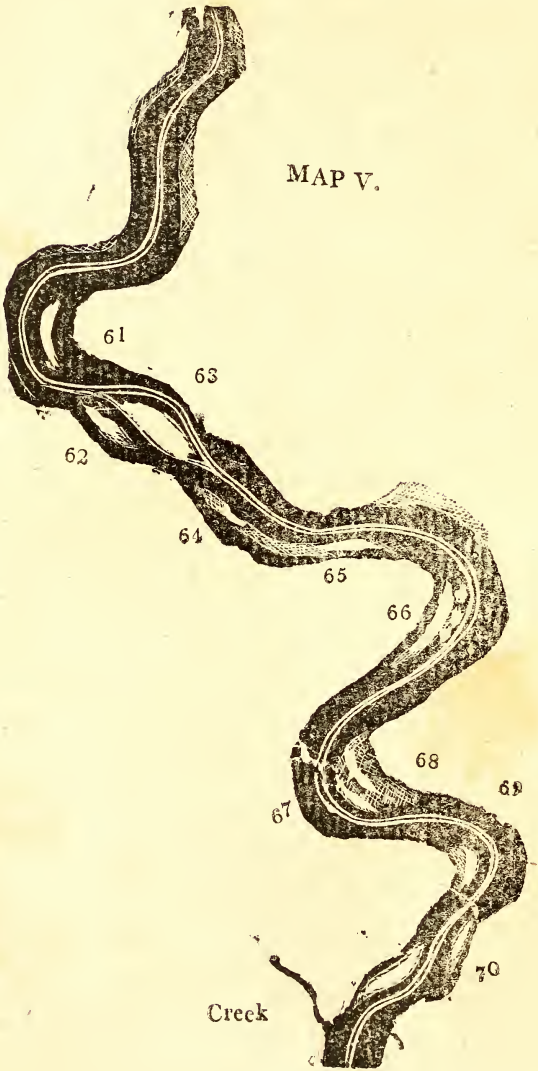
Big Prairie, 3 miles below St. Francis, 6 | 311

This is a beautiful situation on the right side of the river, and the land is very good—One mile and a half back from the river, is a handsome lake 2 miles wide and 5 long; it abounds with swans. This Lake is supported by streams flowing from hills 2 Miles back, and empties itself into the Miss. by a large creek opposite No. 60.

Island No. 60, 3 miles below Prairie, 3 | 314

Is a willow island, near the middle of the river, in high water both sides are equally good, it is about one mile long, when the water is low the left must be taken; for the distance of 20 miles below this, are good landing places on both sides of the river—About 12 miles below No 60 in the middle of the river, in a left hand bend, there is a large flat bar; in low water the left side of it is the best channel. Between 60 & 61, there are a number of short bends full of snags, and having a very rapid current.

(See MAP 5, page 106.)


MAP V.
61
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69
67
70
Creek

Island No. 61, 21 miles below 60, 22 | 336

Close to the left shore, channel on the right side, the left is too narrow to be safe. No 61 is about three miles long; between 60 and 61 the shores are lined with willows.

Island No. 62, three miles below 61, 6 | 342

Is covered with willows and cotton wood, it lies close to the right shore, channel left side; it is about two miles long; nearly opposite the lower point of this, rather on the left shore, begins

Island No. 63,

The channel on either side is good, the left is much the furthest and is full of sawyers Just above the head of this island is a large sand-bar; when the river is in a middling state, you can go between this bar and No. 62; when it is low you cannot pass to the right of it; in very low water, the channel between this bar and No 63, is narrow, and full of snags, and sawyers, and the current is very rapid; the safest channel is on the left side of it. This island is about four miles long; No 63 appears first to view.

Island No. 64, three miles below 63, 9 | 351

The left channel of this is preferred in all stages of the water, the right side may be gone in floods with safety; it is about three miles long. There is good landing immediately below the point on the left shore.

Island No. 65, three miles below 64, 6 | 357

Is small and lies in a bend on the right side, channel on the left, it is about two miles long.

Island No. 66, 4 miles below 65, 6 | 363

Lies pretty close to the right shore, is covered with willows and cotton wood, in low water it is joined by a large sand-bar and three small islands on the left side, the heads of which are covered with drift-wood: the left channel of these must be taken at all times. No. 66 is about four miles long.

Islands Nos. 67 and 68, 5 miles below 66, 9 | 372

These lie side by side and nearly in the middle of the river, in floods go between them, in low water the right of both must be taken, never venture to the left of both; No 67 is on the right of No 68; these islands are about three miles long; the river bends to the left.

Island No. 69, 3 miles below 68, 6 | 378

Lies close to the right shore, is small, and has on its left side a large willow and flat sand-bar, channel on the left at all times; No 69 is about one mile and a half long.

Island No. 70, $2\frac{1}{2}$ miles below 69, 4 | 382

This is small and lies close to the left shore under a

willow point at the upper end of a bend, channel on the right must be taken in all situations of the water ; No. 70 is about one mile and a half long.

Island No. 71, half a mile below 70, 2 384

Is on the right shore, on the left side and near the lower point of the island is a large sand-bar which appears even in very high water, take the left side of both at all times ; in a bend on the left shore is an out-let, which runs out in high water with great velocity, keep out from this bend. No 71 is about four miles long.

A creek 4 miles below 71, 8 392

Empties in on the right shore in a bend, and on the opposite side is a long willow point, extending down the river for a considerable distance ; this has a very pleasant appearance ; one mile below the creek is an old water pass, which is noticed from its now being grown up with willows, on each side of which are large trees ; a little further down is another small, old out-let.

(See MAP 6, page 109.)

Island No 72, 5 miles below the creek, 5 397

Lies very near the right shore; the left side must always be taken in low water, the right may be navigated in floods, but the passage is something longer ; No 72 is about two miles long. Opposite the head of this island and on the right shore

White river empties in,

Where there is excellent landing. About 3 miles up this river is a channel which runs across the country and empties into the Arkensas river twenty miles above the mouth of the latter ; this is a much nearer route to the post and village of Ozark, which is about 30 miles above this water pass, than going in at the mouth of the Arkensas.

Island No. 73, 4 miles below 72, 6 403

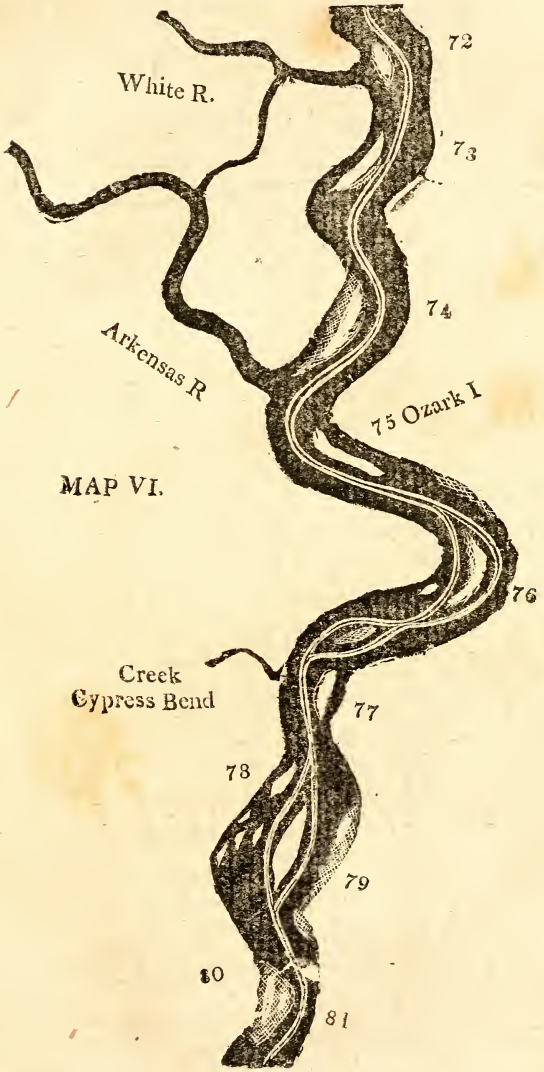
Lies very near the right shore, opposite the middle of this island on the left side of it is a bar, which shews in low water, keep both to the right. No 73 is about three miles long.

Island No 74, 6 miles below 73, 9 412

A large flat willow island, close to the right shore, in high floods this island is cut through in several places by the current, which gives it the appearance of several small islands, at its head it is covered with drift-wood, channel always on the left, the right being very dangerous. No 74 is about five miles long.

Ozark or Arkensas river, 2 miles below 74, 7 419

Empties in on the right shore, and is navigable for a considerable distance up, the village of Ozark is about 50 miles above its mouth.


72
White R.
73
74
Arkensas R
75 Ozark I
MAP VI.
76
Creek
Cypress Bend
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78
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81

Ozark Island, No 75, 3 miles below, 3 | 422

Lies nearest the left shore, in low water take the right channel, in floods the left may be gone in safety, and is the nearest; No 75 is about 3 miles long.

Island No 76, 8 miles below 75, 11 | 433

Lies in the middle of the river. The left side of No 76 is the best in low water; the right is the nearest. Opposite the foot of No 76, close in to the right shore, you will see a very small island, from which no danger need be apprehended. No 76 is about 4 miles long. Four miles below No 76 is a sand bar in the middle of the river; in low water the left side should be taken, where the principal current will be observed to draw; at such times the channel on the right does not afford sufficient water for a heavy boat.

A Sand-bar, 4 miles below 76, 8 | 441

In the middle of the river, this bar appears only in very low water, channel good on either side; it is about half a mile long.

Island No 77, 2½ miles below, 3 | 444

Lies close to the left shore, the right channel must be taken at all times; on the right shore is a large Cypress bend, here a creek empties into the river; the river here begins to widen, and turns gradually to the left for seven or eight miles. No 77 is about three miles long.

Island No 78, 4 miles below 77, 7 | 451

Lies close to the right shore, channel on the left, the right being much obstructed by drift-wood, it is about two and a half miles long.

Island No 79, opposite 78,

And extends about two miles below it, lies near the middle of the river, the left channel ought to be preferred at all times, the right or between the islands is much the nearest and may be gone in floods, if taken must hug the left of 78 and the right side of 79 to clear four small islands lying between it and the right shore. In a bend on the left shore is a small island.

Island No 80, 3½ miles below 79, 8 | 459

Close to the right shore, and on the left side of it is

Island No 81, very small.

Pass both on the left side. No 80 is about 2 miles long.

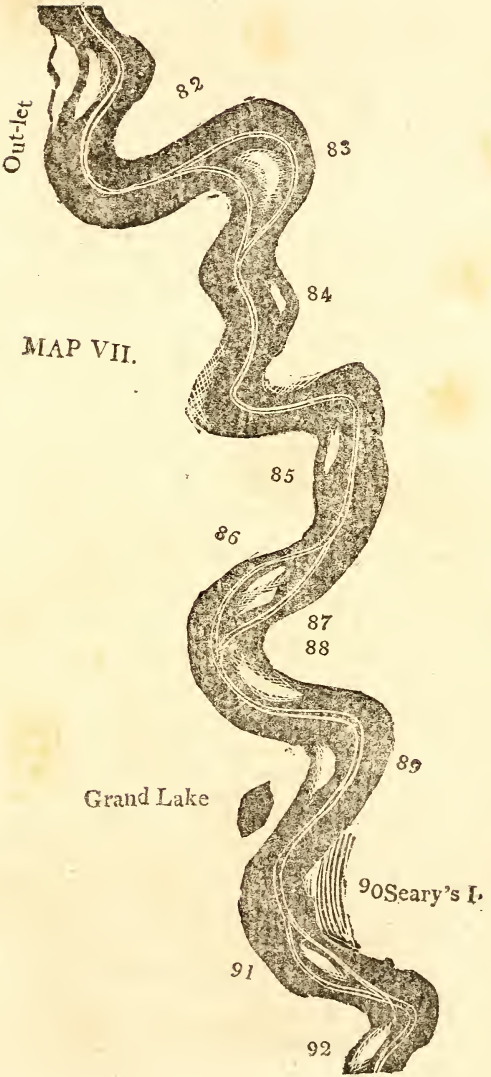
(See MAP 7, page 111.)

Out-let, 7 miles below No 80, 9 | 468

On the right side, its mouth is filled with drift-wood, it returns into the river again a considerable distance below No 82.

Island No 82, 1 mile below the out-let, 1 | 469

Pretty close to the right shore, take the left side, may


Out-let
82
83
84
MAP VII.
85
86
87
88
89
Grand Lake
90Seary's I.
91
92

go on the right in floods but is not safe. No 82 is about five miles long.

Island No 83, 9 miles below 82, 14 488

Lies near the middle of the river, which turns suddenly to the right, the left pass may be gone in safety, but the right is the best and much the nearest, keeping near the right shore to avoid a flat bar that runs out towards the right shore from the head of the island. About three miles below No 83, and about one third from the right shore, is a sand-bar; in low water take the left side of it At the foot of No 83 close to the right shore, is a small island; keep it to the right. No 83 is about three miles long.

Island No 84, 4 miles below 83, 7 490

Close to the left shore, channel on the right at all times, it is about two miles long.

Island No 85, 9 miles below 84, 11 501

Pretty close to the right shore, is covered with willows, channel on the left side at all times, here a good landing may be effected by putting to under the points, or below the island. No 85 is about two miles long.

Islands No. 86 and 87, 7 miles below 85, 9 510

These lie nearly in the middle of the river and opposite each other, and in low water are joined by a bar, the left side is the main channel in low water, in floods the right may be gone with safety and is something nearest, dont venture between them. They are about three miles long.

Island No 88, 2 miles below 87, 5 515

Lies nearest the left shore, the right channel though the longest is the best and widest, the left is good in floods. No 88 is about four miles long.

Island No 89, 4 miles below 88. 8 523

Is small and lies close to the right shore, the left channel must always be taken; it is about two miles long.

Grand Lake, 1 mile below 89, 3 526

Here the old bed of the river is supposed to have run through that part which is now grown up with willows, and which is distinctly marked by the lofty trees on both sides, this is first seen on the right side and then crosses the present channel diagonally; in the old bed on the right side is seen a beautiful island, remarkable for the large trees on it, and its being surrounded with willows; on the left side between the old bed and the present channel is another called

Seary's Island, No 90, about 3 miles long,

Which is formed by the old bed, now grown up with willows on the left, and the present channel on the right.

Island No 91, 4 miles below 90, 7 533

Is a small willow and cotton-wood island in the middle of the river. In low water you must take the right side of this island; when the river is up, you may go on the left side of it, which is something the nearest, but the current is slow. No 91 is about a mile long.

Island No 92, seven miles below 91, 8 | 541

Lies near the middle of the current, river turns to the right, in tolerable high water the right channel is preferred, in low water you must take the left side. It is about three miles long.

(See MAP 8, page 114)

Island No 93, 3 miles below 92, 6 | 547

Lies in the middle of the river. At the head of this island two dangerous bars run out from each side of it, and the proper channels, (the left being the best in low water,) are close to either shore, avoiding the island as much as possible. At the foot of No 93, is a whirlpool, which, if you happen to get into it may do no other injury than detain you a little while and whirl your boat around a few times before you get out of it. It is about three miles long; here commences the

Nine-mile Reach,

Where you have a beautiful view of the river.

Crow's nest island No. 94, 6 miles below 93, 9 | 556

This is a beautiful island, remarkably small, being not more than half a mile in circumference. It is in the middle of the river, and about the middle of the Nine Mile Reach. The best channel is on its right side in low water. The navigator must take care to keep close to the right shore above 94 to avoid a sand-bar at the head of the island.

Island No. 95, 6½ miles below 94, 7 | 563

Lies close to the right shore, and on the left of it is another small island, take the left side of both. No 95 is about two miles long; the river bends to the right.

Island No. 96, 8 miles below 95, 10 | 573

Near the left shore, river bends to the left, channel right side, it is about one mile long.

Island No. 97, about one mile below 96, 2 | 575

A willow and cotton-wood island near the left shore, in floods it is divided by the river running through it in several places, channel on the right side, it is about two miles long.

Islands No 98 and 99, 5 miles below 97, 7 | 582

These lie in a bend and nearest the right shore, 98 is the largest and lies to the left of 99, the channel between them ought to be preferred in all stages of the water, to the left of 98 may be gone in floods; the river bends to the right; 98 is about four miles long.

MAP VIII.

Island No. 100, 12 miles below 98, 16 598

Is a large willow and cotton-wood island lying near the right shore, to the right of which is a small island, channel on the left of both; No. 100 is about 4 miles long.

Islands No. 101 & 102, 3 miles below 100, 7 605

These lie in a bend, 101 lies close to the left shore, 102 to the right of it and extends a little below it, channel on the right of both, the river bends to the left; from the head of 101 to the foot of 102 is about four miles.

Island No. 103, 12 miles below 102, 16 621

Lies below a point on the right shore, channel on the left, the right channel may be gone in floods but is not so safe although much the nearest; opposite 103 on the left side is good landing along a willow shore; the river bends to the right; No. 104 is about four miles long—Opposite the head of this island on the left shore the old bed of the river may be discovered, it runs across from thence to the Yazoo river and enters it about two miles above its mouth, the tract is particularly marked by the young willows with which it is now filled.

Yazoo river, 4 miles below 103, 8 629

Enters in on the left side, both above and below its mouth is a large willow beach; in passing the Yazoo you must keep rather nearest the right shore to avoid the eddies on both sides of the river. The Yazoo rises in Georgia, and the name is rendered famous from the noise which has been made about the lands bordering its banks, which are now well known by the name of the "*Yazoo Speculation.*" It is gentle in its current, and is about 280 yards wide at its mouth. Its surface is frequently covered with swans, wild geese, &c. It enters the Mississippi at nearly right angles, and is about 112 miles above Natchez.

(See MAP 9, page 116.)

Walnut Hills, 12 miles below the Yazoo, 12 641

The scite of Fort M'Henry is still to be seen on the top of these hills, which form an eminence considerably above the adjacent tree-tops. Here is a large eddy which you must avoid getting into—good landing just below the eddy

Island No. 104, 13 miles below Walnut Hills, 13 654

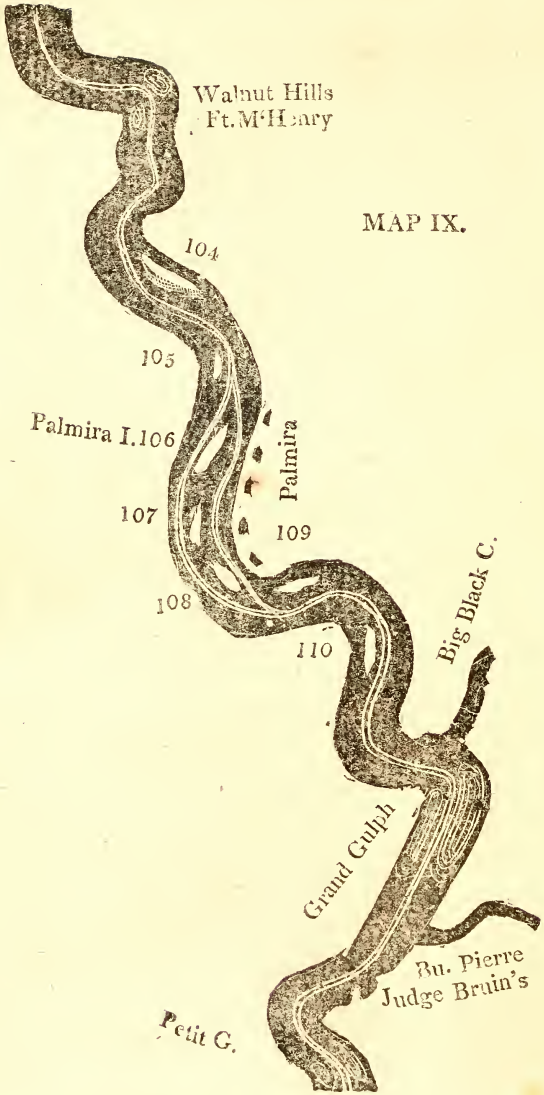
Close to the left shore, channel right side at all times. It is about four miles long.

Island No. 105, 3 miles below 104, 7 661

Close to the right shore, take the left channel, it is a small willow island, one mile long.

Palmira Island, No. 106, 3 miles below 105, 4 665

Near the middle of the river, channel on the right side is best, in high water the left may be gone with safety; it is about four miles long.


Walnut Hills
Ft. M'Henry
MAP IX.
104
105
Palmira I. 106
Palmira
107
109
108
110
Big Black C.
Grand Gulph
Bu. Pierre
Judge Bruin's
Petit G.

Palmira settlement,
Is on the left side of the river, and begins a little above the head of Palmira Island.

Island No. 107, 2 miles below 106, 6 671
Channel good on either side, two miles long.

Island No. 108, 1 mile below 107, 3 674
Lies nearest the left shore, the left channel is safe in high water, if you take it must hug the left point above; the right side of both of the above islands is the main channel. No. 108 is about two miles long.

Island No. 109, about 2 miles below 108, 4 678
Lies close to the left shore; pass on the right side at all times; it is about one mile long.

Island No. 110, 5 miles below 109, 6 684
Lies near the right hand point, channel in floods is good and nearest on the right, the left must be gone in low water; it is about three miles long.

Big Black, 5 miles below 110, 8 692
This creek enters on the left side, and is pretty large.

Grand Gulph, 1 mile below, 1 693
Here are large eddies on both sides of the river, try to pass these without being drawn into them, the one on the left is most dangerous, the water beats with great violence from the point on the right side, the channel runs rather nearest the right shore.

Bayou Pierre, 10 miles below, 10 703
This creek enters in on the left shore—Thirty miles by water up this creek is the thriving village of Port Gibson.

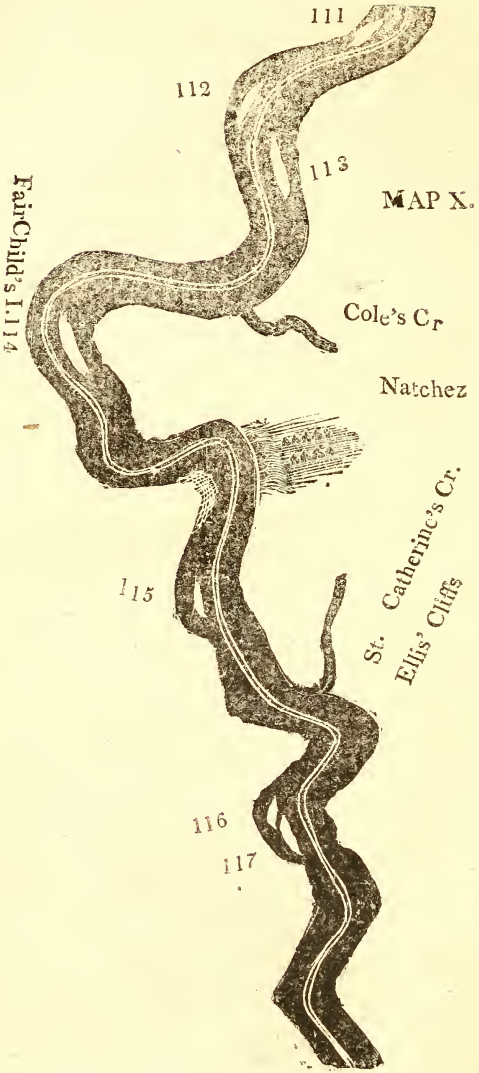
Judge Bruin's, 1½ miles below,
If you wish to land here it is best to pull in a little above Bruin's house, as the water runs with great velocity past the settlement. This gentleman's hospitality and politeness to navigators, seem to be highly spoken of by those who have occasion to call on him—His farm is a very handsome one, on the left side of the river.

Petit Gulph, 8½ miles below Bruin's, 10 713
Here are eddies on both sides of the river, keep near the middle of the current.

(See MAP 10, page 118.)

Island No. 111, 2 miles below Petit Gulph, 2 715
Lies close to the right shore, main channel on the left side, in very low water a bar appears between the head of this island and the left shore, may go on either side of this bar; No. 111 is about four miles long.

Island No. 112, 6 miles below 111, 10 725
Close in a bend on the right shore, and about half way down it, and near the left shore, begins


111
112
113
MAP X.
Fair Child's I. 114
Cole's Cr
Natchez
St. Catherine's Cr.
Ellis' Cliffs
115
116
117

Island No. 113, much larger than 112,

Channel in low water is between the islands, in floods the left of 113 is safe and much the nearest, the river bends to the left; from the head of 112 to the foot of 113 is about four miles.

Cole's creek, 6 miles below 113, 10 735

This creek empties in on the left shore at a bend, the river here winds considerably to the right.

Fair Child's Island, No. 114, 7 miles below, 7 742

Is large and lies pretty close to the left shore, if the water be low you must pass on the right, may go on the left side in floods, which is five or six miles nearest; the river here bends to the left; it is about five miles long. About six miles below this the river again winds to the left, and then turning to the right, you arrive at

THE CITY OF NATCHEZ, 17 759

Occupies a very handsome situation and one that is uncommon on the Mississippi. It is built on a hill nearly perpendicular of about 200 feet in height from the surface of the river. This hill, called the Bluff, affords a fine prospect up and down the river for two or three miles each way. The houses in Natchez are mostly frame, with a great many doors and windows, for the admission of the cool breezes in the hot months; they are low, being generally but one story high, and constructed principally for the convenience of business. The city contains about 300 houses. The Bluff on which the town stands is about 200 yards from the river, and the intermediate space, called the Landing, is covered with a number of dwellings, taverns, dram-shops, and trading houses. The bank being composed of a rich loose sand, the river is constantly making encroachments into this plain or bottom, and will in a few years, most probably, run close to the foot of the Bluff, and entirely annihilate this part of the city.

There is but one road from the Landing up the hill, along which are several Orange and Liquor shops, situated on the brink of the precipice. Though these shops might be undermined by a heavy rain, and precipitated down a steep of 100 feet, yet, such is the temerity of their holders that they do not seem to think of the danger they are in.

In the year 1805, a large portion of the Bluff on the lower border of the town sunk in to a considerable depth; some houses were destroyed, and others moved off with the earth without sustaining any injury.

Here are established several large Mercantile Houses, which are much engaged in the cotton business, and many others less extensive. The city has two printing offices, issuing weekly gazettes, a number of public inns, and many of the mechanic branches are carried on.

The staple commodity of this country is cotton, which is raised to great perfection, and with large profits to the Planters, who in fact accumulate immense fortunes to themselves by following it for a few years. Vast quantities of it is exported from Natchez yearly, to the different sea-port towns in the United States, and to many of those in Europe; England particularly, whose manufactories of cotton indeed depend very much on the American cotton Planters for their supply of that article.

Indigo, rice, flax, tobacco, hemp, and pease, are cultivated here with great success, and some sugar is made. Black cattle and sheep thrive well.—The Natchez country produces Maize or Indian corn, equal if not superior to any other part of the United States; the time of planting it is from the beginning of March until the beginning of July. The cotton is generally planted in the latter end of February and the beginning of March. Wheat does not succeed well; Rye has been raised in some places with success. Plumbs, peaches, and figs are abundant; apples and cherries are scarce. The same kinds of vegetables raised in the middle states succeed here generally.

The same kind of mounds or tumuli found in different parts of the Western country bordering the Ohio, and indeed throughout the United States, are also discovered in the Natchez settlements. In all parts where new plantations are opened, broken Indian earthen-ware is to be met with; some pieces are in tolerable preservation, and retain distinctly the original ornaments; but none of it appears to have ever been glazed.*

From the circumstance of the *Indian-ware*, as it is called, being found, it would appear that this country must have been thickly settled, centuries ago perhaps, with a people much better acquainted with the arts than any of the Aborigines of North America ever did or do now pretend to boast.—This is a subject often touched upon by historians and speculative writers: But both early and late writers seem to be equally in the dark as to the period at which those settlements might have been made, how long they continued, by whom or what nation or language of people made them, the cause of the total extinction or banishment of the settlers—and finally, they are all equally confounded in the dropping of this link in the great chain of human events.—Not unlike the sea, whose waves are bounded by a Divine order, is man's mind—the same thing may be said of both, "so far shalt thou go and no farther."

Pope on the limitation of man's researches, has the following judicious observations:

"Say first, of God above, or Man below,
"What can we reason, but from what we know?

* *Ellicot's Journal.*

" Of man, what see we but his station here,
" From which to reason, or to which refer?
" Through worlds unnumber'd tho' the God be known,
" 'Tis ours to trace him only in our own."

Natchez is a port of Entry, and vessels of 300 or 400 tons burden come up the river to the city, meeting with no other difficulty than the strength of the current and head winds. It is in Lat. 31.° 33′ N. long. 16.° 15.′ W. and is about 300 miles above New Orleans. It has a post office which receives and discharges the Mail regularly once a week.—It is said that a line of stages is soon to be established from Lexington to New Orleans for the purpose of carrying the United States mail.

It is observed that the wool of the sheep in the Natchez district is more hairy and less valuable than it is in the middle States; but that the mutton is well tasted.—It is also observed that domestic animals generally are less tame and docile, owing perhaps to their being more able to get their living in the woods and swamps throughout the year, than is afforded them in the middle and northern states; and to their feeling less dependent on man for protection and subsistence.

The tract of good upland in the Natchez district is not very extensive, being about 130 miles in length along the Mississippi river, and not more than 23 in breadth. This tract is remarkably fertile, but the country being high, and much broken with hills, a few years washing will render the soil of the cultivated parts less productive.

The making of sugar from the cane does not succeed very well in the neighbourhood of Natchez; but from Point Coupee down to the Gulf of Mexico, it is manufactured to advantage and is the staple commodity of that part of the Mississippi—Sweet and sour lemons grow in great plenty on that part of the river.

The climate of Natchez is very changeable in winter, but the summers are regularly hot, being about 14° of permanent heat beyond that of Pennsylvania and New Jersey.

The accumulation of wealth being the grand polar star to which all the pursuits of the inhabitants are directed at present, the acquirements of taste and education perhaps are too much neglected in and about Natchez: But the valuable principle of hospitality generally prevails, especially among the rich planters; and it is this that affords true enjoyment and comfort to the stranger and traveller, and never fails to leave lively impressions of gratitude on the mind of him who thus finds a friend, where, from the peculiar situation of the country, he is or may be most needed.

Island No. 115, 6 miles below Natchez, 6 765

Lies near the middle of the river, both sides are equally safe in a tolerable state of the water, the left being the

nearest, in low water you must take the right passage—No. 115 is about 3 miles long, the river turns a little to the left.

St. Catherine's Creek, 10 miles below 115, 13 778

Enters in at a bend on the left shore.

Ellis's or White Cliffs, 1 mile below, 1 779

These cliffs are on the left bank of the river, which bends short to the right.

Islands Nos. 116 & 117, 7 miles below, 7 786

The left of both is the best channel and the nearest, may go between them in high water; 116 lies nearest the left shore and projects a little above the head of 117; the river bends to the left; these islands are about three miles long.

(See MAP 11, page 123.)

Island No. 118, 14 miles below 116, 17 803

Lies in a bend on the right side, take the left passage at all times. No 118 is about one mile long.

Homochitto River, 2 miles below 118, 3 806

Enters in on the left side, through a willow shore in a bend, it is a small river.

Buffaloe Creek, 6 miles below Homochitto, 6 812

This is a small creek, entering in on the left side.

Loftus' Heights, 2 miles below Buffaloe, 2 814

Are on the left bank, and on which is situated

Fort Adams.

Here is a large eddy on the left side immediately above the fort; in order to land near the fort, you must run near the lower end of the eddy before you touch it, then pull in and it will carry you up to the landing place.

Line of Demarkation, below the fort, 6 820

This line was agreed upon between Spain and the United States several years prior to the latter government taking possession of Louisiana as ceded to it by France.—It crosses the river in 31 degrees N. latitude.

About one mile below the line is what is called the *great cut off*, which is only five miles across, and it is reckoned as the river runs fifty four miles round.

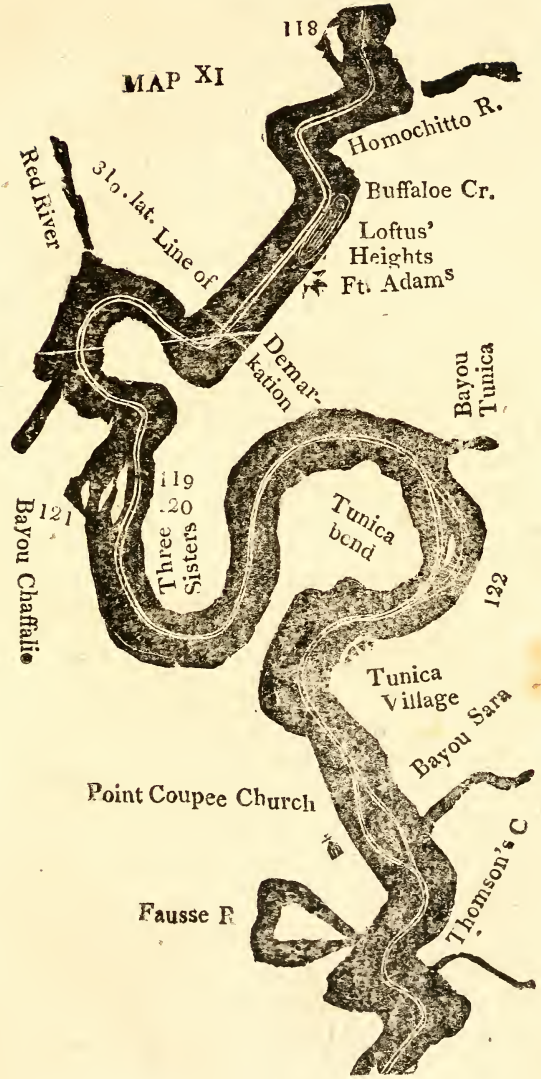
Red River, 9 miles below the line, 9 829

This is a very considerable river entering in at a large bend on the right shore.*

Bayou Chaffalio, 3 miles below Red river, 3 832

Be careful that you keep pretty close to the left shore from Red river below this place, to avoid being drawn into this current, which runs out on the right shore with great rapidity. This is the first large body of water which leaves

* *For a particular account of Red River, See Appendix.*


MAP XI
118
Homochitto R.
Buffaloe Cr.
Loftus' Heights
Ft. Adams
31o. lat. Line of
Red River
Demar-kation
Bayou Tunica
119
120
121
Three Sisters
Bayou Chaffalio
Tunica bend
122
Tunica Village
Bayou Sara
Point Coupee Church
Fausse R
Thomson's C

the Mississippi, and falls by a regular, and separate channel into the Gulf of Mexico. Notwithstanding the magnitude of this river, it is not navigable to the Gulf of Mexico, owing to an immense floating bridge, or raft across it, of many leagues in length, and so firm and compact in some places that cattle and horses are driven over it. This astonishing bridge is constantly augmented by the trees and rubbish which the Chaffalio draws out of the Mississippi in floods.

Three Sisters, Islands Nos. 119, 120 & 121, 11 843

No. 119 is nearest the left shore, 120 lies to the right of it, and 121 still further to the right close in a bend on the right shore; channel past these is always on the left in low water, may go between 119 and 120 in high floods; the river here is straight for several miles. No. 119 is about 3 miles long.

Bayou Tunica, below the Three Sisters, 35 878

Is a small creek emptying in on the left side, on which are considerable settlements, cotton farms, &c.

Island No. 122, 6 miles below Bayou Tunica, 6 884

Lies in the middle of the river, may pass on either side.

Tunica Village, 4 miles below 122, 4 888

Is situated on the left bank of the river, which for about 30 miles above has been forming nearly a complete circle, and now comes within one mile and a half of the current, where it runs nearly in an opposite direction. This is called the *Tunica Bend*.

Point Coupee Church, 12 900

Stands on the right bank, and opposite on the left side

Bayou Sara empties in.

About 9 miles up this creek is a beautiful settlement, cotton grows here in great perfection; David Bradford, Esq. formerly of Pennsylvania, resided here.

A Sand Bar opposite Bayou Sara,

Pass on either side, it is not seen in high water.

Fausse Riviere, or Point Coupee, 5 905

This is the old bed of the river, and is something like the Tunica bend, but not so large; it was cut through a few years ago by some Canadian traders, by which a distance of about twenty miles is saved; it is on the right side of the present channel. Here is a beautiful settlement called

Point Coupee Settlement,

Here commences the embankment or Levee on the right side of the river, and continues down to Orleans, and it is here where the beauty of the Mississippi and the delightful prospect of the country open to view. The banks of the river from below Point Coupee on the right, and from Baton Rouge on the left side down to the city of Orleans, have the appearance of one continued village of handsome

and neatly built houses. They are frame buildings of one story high, and stand considerably elevated on piles or pickets from the ground, are well painted and nicely surrounded with orange trees, whose fragrance add much delight to the scenery.

Thompson's Creek, left shore,	2	907

Up this creek also are some fine cotton plantations, the soil is remarkably rich and produces great crops.

Cliffs on the left bank, one mile long,	2	909

(See MAP 12, page 126.)

Islands Nos. 123 and 124, 3 miles below,	4	913

Lie in the middle of the river, the one immediately below the other, channel good on either side. They are about five miles long. Thence a fine river to

Baton Rouge, 19 miles below 124,	24	937

Is on the left bank of the river. Here commences the high lands contiguous to the river, and are 30 or 40 feet above its greatest rise. Here also is a fine settlement called

Baton Rouge Settlement.

The Levee on the left side of the river commences a little above this settlement.

Bayou Manchac, or out-let, left shore,	15	952

Here the river turns short to the right.

Bayou Placquemine, or out-let, right side,	8	960

Here the river winds short to the left, and from thence to N. Orleans its general course is pretty near that of S. E.

Manchac Church, left bank,	10	970
Bayley's, a noted cotton planter, right side,	4	974
Island No. 126, 7 miles below Bayley's,	7	981

Lies nearest the right shore, channel left side, it is about one mile and a half long.

Bayou la Fourche, an out-let, right side,	10	991
La Fourche Church, right bank,	1	992
Arnold's, a sugar planter, right bank.	4	996

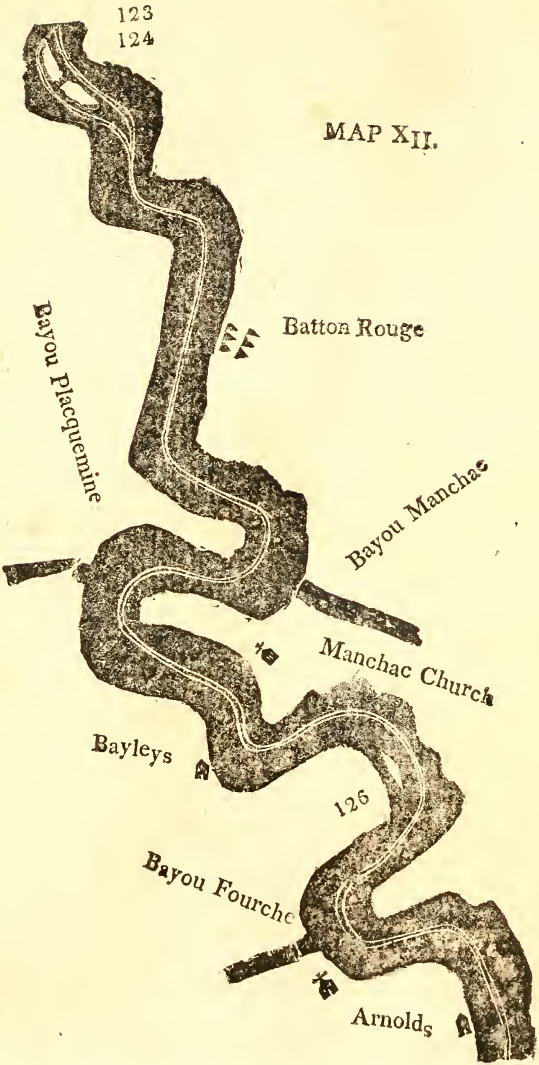
(See MAP 13, page 127.)

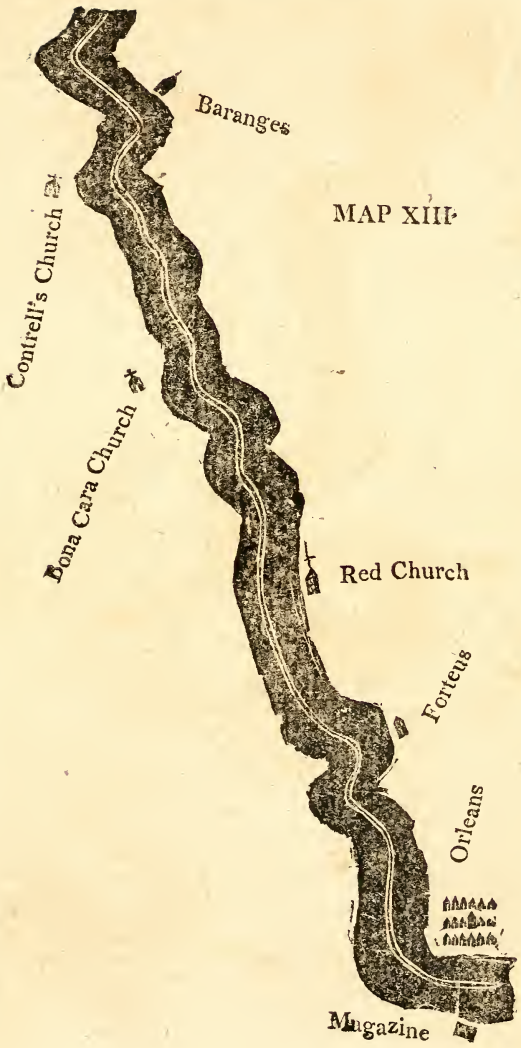
Baranges, a sugar planter, left side,	5	1001

This seat is said to be the handsomest on the river.

Contrell's Church, right bank,	5	1006
Bona Cara Church, right bank,	18	1024
Red Church, left bank,	18	1042
Forteus's a sugar planter, left bank,	15	1057
Orange Grove, left bank,	12	1069
NEW-ORLEANS,*	3	1072

* For a description of New Orleans, see Appendix.


123
124
MAP XII.
Batton Rouge
Bayou Placquemine
Bayou Manchac
Manchac Church
Bayleys
126
Bayou Fourche
Arnolds


Baranges
MAP XIII.
Contrell's Church
Bona Cara Church
Red Church
Fortens
Orleans
Magazine

THE navigator having now arrived, after an irksome passage of between five and six weeks, (about the time it takes to descend from Pittsburgh) at the grand mart of business, the Alexandria of America, he leaps upon shore with ectacy, securing his boat to the bank with a careful tie, mounts the Levee, and with elated heart and joyful countenance, receives the warm and friendly hand of a fellow citizen, in whose integrity he confides, and to whom in confidence he can dispose of his cargo.—What a reverse in the situation of a trader, since the banks of the Mississippi have become the soil of the United States—since a governor of a republican people has been happily placed in the chair of not only one but many tyrants—since in fact he traffics with those to whom he looks up as friends, instead of those whose every glance was dire jealousy and suspicion, whose demeanor, bombastic pride and ostentation; whose pursuit and plan in trade was one continued system of bribery, fraud, and chicanery, from the first authority in the old to the last in this their foreign government.—What a reverse in the situation of you, western Americans! What a conquest gained! a conquest equal to a second revolution! a vast and almost unlimited territory acquired without the loss of a drop of blood! Happy Columbians!—prosperity smiles, must smile, on all governments equally mild, and equally just with yours!

The river opposite New Orleans is about one mile and a half in breadth, and notwithstanding the apparent velocity of the current and the distance to the sea, it "perceptibly ebbs and flows as high up as the city from 12 to 18 inches perpendicular."* It is about 108 miles to the mouth of the river from the city; to the English Bend it is 17 miles, to Fort Plaquemines 48, thence to the *Passes*, where the river branches out into three parts, 24 miles, thence to the mouths of the river 19 miles. And here "the Mississippi discharges itself into a sea that may be compared to the Mediterranean, bounded on the north and south by the continents of Europe and Africa, as the Mexican sea is by the two Americas."

In a much admired and justly celebrated work†, the author of which speaking of the convulsions which many parts of the country which he describes must have undergone in various periods of time, observes with respect to the Gulph of Mexico, "While ruminating on these subjects, I have often been hurried away by fancy, and led to imagine, that what is now the bay of Mexico, was once a champaign country; and that from the point or cape of Florida, there was a continued range of mountains through Cuba, Hispaniola, Porto Rico, Martinique, Guadaloupe, Barbadoes, and Trinidad, till it reached the coast of America, and formed the shores which bounded the ocean, and guarded the country behind; that by some convulsion or shock of nature, the sea had broken through these mounds, and deluged that vast plain, till it reached the foot of the Andes; that being there heaped up by the trade winds, always

* MS. Journal of Col. George Morgan.
† Jefferson's Notes on Virginia.

blowing from one quarter, it had found its way back, as it continues to do, through the gulph, between Florida and Cuba, carrying with it, the loam and sand it may have scooped from the country it had occupied, part of which it may have deposited on the shores of North America, and with part formed the banks of Newfoundland. But, says our author, these are only the visions of fancy."

Appendix.

A BRIEF NOTICE OF THE SPRINGS, MINES, CURIOSITIES, &c. ON THE WESTERN WATERS.

A CELEBRATED author* in his observations on our western waters, has suggested an idea, that " the whole scope of country from above a range of mountains which cross the Ohio somewhere below the falls, as high up as Pittsburgh and bordering lake Erie, was once overwhelmed with water, forming an immense lake. That the summit of those hills was sufficiently high to do this, and that by some great convulsion of nature, this barrier was rent to its base, and the waters being thus let loose, the lake above was drained, and the floods centering from all parts of the higher to the lower grounds, formed the bed of the river now called Ohio."

This great revolution of waters, our author thinks, changed the face of the country, and filled our hills with vast bodies of logs, drift-wood, leaves, &c. which through time have formed those veins of fine stone-coal, of which we reap the benefit daily. As a corroboration of this idea of Mr. Volney, there are frequently found in our coal small pieces resembling exactly the grain of the wood, and the bark of a tree; and it retains this appearance even after it has gone through the fire and reduced to cinder. Red pieces of cinder are also frequently discovered, resembling *crocos*,

* Volney's View of America.

and which answers our silversmiths for the same purposes as does that substance. It also answers instead of emery, for sharpening knives, razors, &c. if it be well pounded, sifted, and mixed with sweet-oil.

Near Georgetown, about 38 miles below Pittsburgh, on the Ohio, a mine of gold has lately been discovered, a specimen of which having been tried by a silversmith in Pittsburgh, who declared it to be *pure virgin gold*, and without any alloy. The lump produced had the appearance of having been found in a running water.

A clay well calculated for the manufacture of delph-ware, smoking pipes, &c. has lately been discovered near Pittsburgh. In a creek emptying into the Allegheny a small distance above Pittsburgh, is found a stone which answers every purpose of the oil-stone made use of by carpenters, joiners, &c. On the side of the hill to the east of the Allegheny river, about two miles above Pittsburgh, is a *spring*, the waters of which have performed cures for the cholera morbis. It also cures the inflammatory sore eyes.

On the Great Kanhawa, opposite the mouth of Cripple creek, Montgomery county, Vir. are mines of lead; the metal of which is accompanied with a portion of silver, too small however to be worth the trouble of separation. The portion yielded is from 50 to 80lb. pure metal from 100lb. of washed ore. On the opposite side of the river, one mile from the ore bank, is a furnace which works about 25 tons of lead a year.

Valuable lead mines are said to abound in Cumberland, below the mouth of Red river. And in a hill between Cumberland and Tennessee rivers, is a bank of *white earth* of great extent supposed to be good for making a fine kind of earthen ware, and a short distance from it is a bank of *red clay*, which is mixed with water and made use of for painting.

On Rock river, which empties into the Mississippi, very valuable lead mines abound, and which are said to be the most extensive on the western waters—these are very little worked.

About 60 miles N. W. of Pittsburgh, and not far from the line between the states of Ohio and Pennsylvania, is a salt spring, the water of which being weak very little attention is paid to it as yet. There are considerable salt-works carried on within about 30 miles of Chilicothe, Ohio state.

Large salt-springs abound at the Blue Lick, Big Bone, Bullet's Lick, and on the north fork of Holstein; the waters of these springs yield from one to one bushel and a half of salt from 1000 gallons of water, being about 80lb. of water to 1lb. of salt; but of sea water 25lb. yield 1lb. of salt. On the Youghioghany at Turkey-foot is a salt spring; the river however overflows it except in very low water; this spring is not worked.

Mr. Jefferson in his Notes observes that "In the low grounds of the Great Kanhawa, 7 miles above the mouth of Elk river, and 67 above that of Kanhawa itself, is a hole in the earth of the capacity of 30 or 40 gallons, from which issues constantly bituminous vapour, in so strong a current as to give to the sand about its orifice the motion which it has in a boiling spring. On presenting a lighted candle or torch within 18 inches of the hole, it flames up in a column of 18 inches in diameter, and 4 or 5 feet in height, which sometimes burns out in 20 minutes, and at other times has been known to continue three days, and then has been left still burning. The flame is unsteady, of the density of that of burning spirits, and smells like burning pit coal. Water sometimes collects in the bason, which is remarkably cold, and is kept in ebullition by the vapour issuing through it. If the vapour be fired in that state, the water soon becomes so warm that the hand cannot bear it, and evaporates wholly in a short time.

"A similar one to this is on Sandy river, the flame of which is a column of about 12 inches in diameter, and three feet high."

Iron mines are said to have been found between the Muskingum and the Ohio, others in Kentucky, between the Cumberland and Barren rivers, between Cumberland and Tennessee, on Reedy creek, near the Long Island, and on Chesnut creek, a branch of the Great Kanhawa.

On the Yough and its branches, are very valuable iron ore banks, and on Big Beaver creek mines of ore are said to have been discovered.

What is called the Iron Banks on the Mississippi are said by competent judges to have no ore in them. And indeed what is as yet known of that country, it seems to want iron, though rich in other mines, of lead especially.

AN ACCOUNT OF LOUISIANA,

DISCOVERY, SETTLEMENT, AND TRANSFER.

THE country east and west of the Mississippi was called *Florida* by Sebastian Cabbot, who visited that part of the continent by order of Henry VII. of England, about the year 1497.

John Pontio de Leon, a Spaniard, arrived on the coast, anno 1512, attempted a settlement, and erected a small fort. The subjects of Charles X. of France, seem to have made several attempts to settle this country but were still defeated by the Spaniards, until the year 1684, when Mons. De la Sale discovered the mouth of the Mississippi, and built on the bay a fort, which he called "Fort Lewis."—The founder having been assassinated, the fort was abandoned until anno 1698, when captain Iberville penetrated up the Mississippi, and having planted a few settlers, called the country *Louisiana.* Until this time the Spaniards had a few forts on the coast, of which Pensa Cola seems to have been the principal, which is 14 leagues east of the isle of Dauphin. About the year 1720, Mons. La Sueur sailed up the St. Lewis river or Mississippi above 760 leagues from its mouth, and he observes that the river is known to flow still further up.

From this time it remained in the hands of France, whose monarchs made several grants of its trade, in particular to Mr. Crosat in 1712, and some years afterwards, with his acquiescence, to the well known company projected by Mr. Law, and which was relinquished in 1731. By a secret convention on the 3d November, 1762, the French government ceded so much of the province as lies beyond the Mississippi, as well as the island of New Orleans, to Spain, and by the treaty of peace which followed in 1763, the whole territory of France and Spain, eastward of the middle of the Mississippi to the Iberville, thence through the middle of that river, and the lakes of Maurepas and Ponchartrain to the sea, was ceded to Great Britain. Spain having conquered the Floridas from Great Britain, during our revolutionary war, they were confirmed to her by the treaty of peace of 1783. By the treaty of St. Ildefonso, of the 1st of Oct. 1800, his Catholic Majesty promises and

engages on his part to cede back to the French Republic, six months after the full and entire execution of the conditions and stipulations therein contained, relative to the duke of Parma, " the colony or province of Louisiana, with the same extent that it actually has in the hands of Spain, that it had when France possessed it, and such as it ought to be after the treaties subsequently entered into between Spain and other states." This treaty was confirmed and enforced by that of Madrid, of the 21st of March, 1801.—From France it passed to us by the treaty of the 30th of April, 1803, and was taken regular possession of by our government on the 20th of December following.

BOUNDARIES.

The precise boundaries of Louisiana, westwardly of the Mississippi, though very extensive, are at present involved in some obscurity. Data are equally wanting to assign with precision its northern extent. From the source of the Mississippi, it is bounded eastwardly by the middle of the channel of that river to the 31st degree of latitude: thence, it is asserted upon very strong grounds, that according to its limits, when formerly possessed by France, it stretches to the east, as far, at least, as the river Perdigo, which runs into the bay of Mexico, eastward of the river Mobile.

DIVISIONS.

This province as held by Spain, including a part of West Florida, was laid off into the following principal divisions: Mobile, from Balise to the city, New Orleans and the country on both sides of Lake Ponchartrain, first and second German coasts, Catahanose, Fourche, Venezuela, Iberville, Galvez-town, Baton-Rouge, Pointe Coupee, Atacapas, Opelousas, Ouachita, Avoyelles, Rapide, Natchitoches, Arkansas, and the Illinois.

In the Illinois there were commandants, at New Madrid, St. Genevieve, New Bourbon, St. Charles and St. Andrews, all of which were subordinate to the commandant general.

Baton-Rouge having been made a government, subsequently to the treaty of limits, &c. with Spain, the posts of Manchac and Thompson's creek, or Feliciana, were added to it.—Chapitoulas was sometimes regarded as a separate command, but was afterwards included within the jurisdiction of the city. The lower part of the river had likewise occasionally a separate commandant.

Many of the present establishments are separated from each other by immense and trackless deserts, having had no communication with each other by land, except now and then a solitary instance of its having been attempted by hunters, who had to swim rivers, expose themselves to the inclemency of the weather, and carry their provisions on their backs, for a time proportioned to the length of their journey. This was particularly the case on the west of the Mississippi, where the communication was kept up only by water, between the capital and the distant settlements; three months having been required to convey intelligence from one to the other, by the Mississippi. The usual distance accomplished by a boat in ascending, is five leagues per day. The rapidity of the current in the spring season especially when the waters of all the rivers are high, facilitates the descent, so that the same voyage by water, which requires three or four months to perform from the capital, may be made to it in from 12 to 16 days. The principal settlements in Louisiana are on the Mississippi, which begins to be cultivated about 20 leagues from the sea, where the plantations are yet thin, and owned by the poorest people. Ascending, you see them improve on each side, till you reach the city, which is situated on the east bank, on a bend of the river, 35 leagues from the sea.

CHAPITOULAS, FIRST AND SECOND GERMAN COASTS.—CATAHANOSE—FOURCHE, AND IBERVILLE.

The best and most improved are above the city, and comprehend, what is there known by the Paroisse de Chapitoulas, Premier and Second Cote des Allemands, and extend sixteen leagues.

Above this begins the parish of Catahanose, or first Acadian settlement, extending eight leagues on the river. Adjoining it and still ascending is the second Acadian settlement or parish of the Fourche, which extends about six leagues. The parish of Iberville then commences and is bounded on the east side by the river of the same name, which though dry a great part of the year, yet, when the Mississippi is raised, it communicates with the lakes Maurepas and Ponchartrain, and through them with the sea, and thus forms what is called the island of New Orleans. Except on the point just below the Iberville, the country from New Orleans is settled the whole way along the river,

and presents a scene of uninterrupted plantations in sight of each other, whose fronts to the Mississippi are all cleared, and occupy on that river from 5 to 25 acres with a depth of 40; so that a plantation of 5 acres in front contains 200. A few sugar plantations are formed in the parish of Catahanose, but the remainder is devoted to cotton and provisions, and the whole is an excellent soil incapable of being exhausted. The plantations are but one deep on the island of New Orleans, and on the opposite side of the river as far as the mouth of the Iberville, which is thirty five leagues above New Orleans.

BAYOU DE LA FOURCHE—ATACAPAS, AND OPELOUSAS.

About twenty five leagues from the last mentioned place on the west side of the Mississippi, the creek or bayou of the Fourche, called in old maps La Riviere des Chitamaches, flows from the Mississippi, and communicates with the sea to the west of the Balise. The entrance of the Mississippi is navigable only at high water, but will then admit of craft of from 60 to 70 tons burthen. On both banks of this creek are settlements, one plantation deep, for near fifteen leagues, and they are divided into two parishes. The settlers are numerous, though poor, and the culture is universally cotton. On all creeks making from the Mississippi, the soil is the same as on the bank of the river, and the border is the highest part of it, from whence it descends gradually to the swamp. In no place on the low lands is there depth more than suffices for one plantation, before you come to the low grounds incapable of cultivation.—This creek affords one of the communications to the two populous and rich settlements of Atacapas and Opelousas formed on and near the small rivers Teche and Vermillion which flow into the bay of Mexico. But the principal and swiftest communication is by the bayou or creek of Placquemines, whose entrance into the Mississippi is seven leagues higher up on the same side, and thirty two above New Orleans. These settlements abound in cattle and horses, have a large quantity of good land in their vicinity, and may be made of great importance. A part of their produce is sent be sea to New Orleans, but the greater part is carried in batteaux by the creeks above mentioned.

BATON ROUGE AND ITS DEPENDENCIES.

Immediately above the Iberville, on both sides of the

Mississippi lies the parish of Manchac, which extends four leagues on the river, and is well cultivated. Above it commences the settlement of Baton Rouge, extending about 9 leagues. It is remarkable as being the first place, where the high land is contiguous to the river, and here it forms a bluff from thirty to forty feet above the greatest rise of the river. Here the settlements extend a considerable way back on the east side; and this parish has that of Thomson's creek and Bayou Sara subordinate to it. The mouth of the first of these creeks is about forty nine leagues from New Orleans, and that of the latter two or three leagues higher up. They run from north east to south west, and their head waters are north of the 31st degree of latitude. Their banks have the best soil, and the greatest number of good cotton plantations of any part of Louisiana, and are allowed to be the garden of it.

POINTE COUPEE, AND FAUSSE RIVIERE.

Above Baton Rouge, at the distance of fifty leagues from New-Orleans, and on the west side of the Mississippi is Pointe Coupee, a populous and rich settlement, extending eight leagues along the river. Its produce is cotton. Behind it, on an old bed of the river, now a lake, whose outlets are closed up, is the settlement of Fausse Riviere, which is well cultivated.

In the space now described from the sea as high as and including the last mentioned settlement, is contained three fourths of the population, and seven-eighths of the riches of Louisiana.

From the settlement of Pointe Coupee on the Mississippi to Cape Girardeau above the mouth of the Ohio, there is no land on the west side, that is not overflowed in the spring to the distance of eight or ten leagues from the river with from two to twelve feet water, except a small spot near New-Madrid; so that in the whole extent there is no possibility of forming a considerable settlement contiguous to the river on that side. The eastern bank has in this respect a decided advantage over the western, as there are on it many situations which effectually command the river.

RED RIVER AND ITS SETTLEMENTS.

On the west side of the Mississippi, seventy leagues from New-Orleans, is the mouth of the Red river, on whose

banks and vicinity are the settlements of Rapide, Avoyelles, and Natchitoches, all of them thriving and populous. The latter is situate seventy-five leagues up the Red river. On the north side of the Red river a few leagues from its junction with the Mississippi is the Black river, on one of whose branches, a considerable way up, is the infant settlement of Ouachita, which from the richness of the soil may be made a place of importance. Cotton is the chief produce of these settlements, but they have likewise a considerable Indian trade. The river Rouge, or Red river is used to communicate with the frontiers of New-Mexico.

CONCORD—ARKANSAS—ST. CHARLES—ST. ANDREW, &c.

There is no other settlement on the Mississippi except the small one called Concord, opposite to the Natchez, till you come to the Arkansas river, whose mouth is two hundred and fifty leagues above New-Orleans.

Here there are but a few families, who are more attached to the Indian trade (by which chiefly they live) than to cultivation. There is no settlement from this place to New-Madrid, which is itself inconsiderable. Ascending the river you come to Cape Girardeau, St. Genevieve and St. Louis, where, though the inhabitants are numerous, they raise little for exportation, and content themselves with trading with the Indians and working a few lead mines.—This country is very fertile, especially on the banks of the Missouri, where there have been formed two settlements, called St. Charles and St. Andrew, mostly by emigrants from Kentucky. The peltry procured in the Illinois is the best sent to the Atlantic market; and the quantity is very considerable. Lead is to be had with ease, and in such quantities as to supply all Europe, if the population were sufficient to work the numerous mines to be found within two or three feet from the surface in various parts of the country. The settlements about the Illinois were first made by the Canadians, and their inhabitants still resemble them in their aversion to labour, and love of a wandering life. They contain but few negroes, compared to the number of whites; and it may be taken for a general rule, that in proportion to the distance from the capital, the number of blacks diminish below that of the whites; the former abounding most on the rich plantations in its vicinity.

GENERAL DESCRIPTION OF UPPER LOUISIANA.

When compared with the Indiana territory, the face of the country in Upper Louisiana is rather more broken, though the soil is equally fertile. It is a fact not to be contested, that the west side of the river possesses some advantages, not generally incident to those regions. It is elevated and healthy, and well watered with a variety of large rapid streams, calculated for mills and other water works. From Cape Girardeau, above the mouth of the Ohio, to the Missouri, the land on the east side of the Mississippi is low and flat, and occasionally exposed to inundations; that on the Louisiana side, contiguous to the river, is generally much higher, and in many places very rocky on the shore. Some of the heights exhibit a scene truly picturesque. They rise to a height of at least three hundred feet, faced with perpendicular *lime and free-stone*, carved into various shapes and figures by the hand of nature, and afford the appearance of a multitude of antique towers. From the tops of these elevations, the land gradually slopes back from the river, without gravel or rock, and is covered with valuable timber. It may be said with truth that, for fertility of soil, no part of the world exceeds the borders of the Mississippi; the land yields an abundance of all the necessaries of life, and almost spontaneously; very little labor being required in the cultivation of the earth. That part of Upper Louisiana, which borders on North Mexico, is one immense *prairie;* it produces nothing but grass; it is filled with buffalo, deer, and other kinds of game; the land is represented as too rich for the growth of forest trees.

It is pretended that Upper Louisiana contains in its bowels many silver and copper mines, and various specimens of both are exhibited. Several trials have been made to ascertain the fact; but the want of skill in the artists has hitherto left the business undecided [b.]

The salt works are also pretty numerous: some belong to individuals; others to the public. They already yield an abundant supply for the consumption of the country; and if properly managed, might become an article of more general exportation. The usual price per bushel is 150 cents in *cash* at the works. This price will be still lower as soon as the manufacture of the salt is assumed by government, or patronised by men who have large capitals to

employ in the business. One extraordinary fact relative to salt must not be omitted. There exists about 1000 miles up the Missouri, and not far from that river, *a Salt Mountain!* The existence of such a mountain might well be questioned, were it not for the testimony of several respectable and enterprising traders, who have visited it, and who have exhibited several bushels of the salt to the curiosity of the people of St. Louis, where some of it still remains. A specimen of the same salt has been sent to Marietta [c]. This mountain is said to be 180 miles long, and 45 in width, composed of solid rock salt, without any trees, or even shrubs on it. Salt springs are very numerous beneath the surface of this mountain, and they flow through the fissures and cavities of it. Caves of salt-petre are found in Upper Louisiana, though at some distance from the settlements. Four men on a trading voyage, lately discovered one several hundred miles up the Missouri. They spent five or six weeks in the manufacturing of this article, and returned to St. Louis with 400 weight of it. It proved to be good, and they sold it for a high price.

The geography of the Mississippi and Missouri, and their contiguity for a great length of way, are but little known. The traders assert, that 100 miles above their junction, a man may walk from one to the other in a day; and it is also asserted, that 700 miles still higher up, the portage may be crossed in four or five days. This portage is frequented by traders, who carry on a considerable trade with some of the Missouri Indians.—Their general route is through Green Bay, which is an arm of Lake Michigan; they then pass into a small lake connected with it, and which communicates with the Fox river; they then cross over a short portage into the Ouiconsing river, which unites with the Mississippi some distance below the falls of St. Anthony. It is also said, that the traders communicate with the Mississippi above these falls, through Lake Superior—but their trade in that quarter is much less considerable.

CANAL OF CARONDELET.

Behind New Orleans is a canal about $1\frac{1}{2}$ mile long, which communicates with a creek called the Bayou St. Jean, flowing into Lake Ponchartrain. At the mouth of it, about $2\frac{1}{2}$ leagues from the city, is a small fort called St. Jean, which commands the entrance from the Lake. By this creek the

communication is kept up through the Lake and the rivulets to Mobile and the settlements in West Florida. Craft drawing from 6 to 8 feet water can navigate to the mouth of the creek, but except in particular swells of the Lake cannot pass the bar without being lightened.

ST. BERNARDO.

On the east side of the Mississippi, about five leagues below New Orleans and at the head of the English Bend, is a settlement known by the names of the Poblacion de St. Bernardo, or the Terre aux Bœuf, extending on both sides of a creek or drain whose head is contiguous to the Mississippi, and which flowing eastward, after a course of 18 leagues, and dividing itself into two branches, falls into the sea, and lake Borgne. This settlement consists of two parishes; almost all the inhabitants of which are Spaniards from the Canaries, who content themselves with raising fowls, corn and garden stuff for the market at N. Orleans. The lands cannot be cultivated to any great distance from the banks of the creek, on account of the vicinity of the marsh behind them, but the place is susceptible of great improvement, and of affording another communication to small craft of from eight to ten feet draught between the sea and the Mississippi.

SETTLEMENTS BELOW THE ENGLISH TURN.

At the distance of 15 leagues below New Orleans, the settlements on both banks of the river are of but small account. Between these and the fort of Plaquemines, the country is overflowed in the spring, and in many places is incapable of cultivation at any time, being a morass almost impassible for man and beast. This small tongue of land extends considerably into the sea, which is visible on both sides of the Mississippi from a ship's mast.

COUNTRY FROM PLAQUEMINES TO THE SEA, AND EFFECT OF THE HURRICANES.

Plaquemines to the sea is 12 or 13 leagues. The country is low and swampy, chiefly covered with reeds, having little or no timber, and no settlement whatever. It may be necessary to mention here that the whole lower part of the country from the English Turn, downwards, is subject to overflowing in hurricanes, either by the recoiling of the river, or reflux from the sea on each side, and on more than one occasion it has been covered from the depth of from 2

to 10 feet, according to the descent of the river, whereby many lives were lost, horses and cattle swept away, and a scene of destruction laid. The last calamity of this kind happened in 1794, but fortunately they are not frequent.—In the preceding year the engineer who superintended the erection of the fort of Plaquemines, was drowned in his house near the fort, and the workmen and garrison escaped only by taking refuge on an elevated spot in the fort, on which there were, notwithstanding, 2 or 3 feet water.—These hurricanes have generally been felt in the month of August: their greatest lasts for about 12 hours. They commence in the southeast, veer about to all points of the compass, are felt most severely below, and seldom extend more than a few leagues above New Orleans. In their whole course they are marked with desolation. Until that of 1793, there had been none felt from the year 1780.

PASSES, OR MOUTHS OF THE MISSISSIPPI.

About 8 leagues below Plaquemines, the Mississippi divides itself into three channels, which are called the Passes of the river, viz. the East, South and West Passes. Their course is from five to six leagues to the sea. The space between is a marsh with little or no timber on it; but from its situation, it may hereafter be rendered of importance. The East Pass, which is on the left hand going down the river, is divided into two branches about two leagues below, viz. the Pass a la Loutre, and that known to mariners by the name of the Belize, at which there is a small block house and some huts of the pilates who reside only here. The first of these secondary channels contains at present but 8 feet water; the latter from 14 to 16, according to the seasons. The South Pass, which is directly in front of the Mississippi, has always been considered as entirely choaked up, but has 10 feet water. The S. W. Pass, which is on the right, is the longest and narrowest of all the Passes, and a few years ago had 18 feet water, and was that by which the large ships entered and sailed from the Mississippi. It has now but 8 feet water, and will probably remain so for some time. In speaking of the quantity of water in the Passes, it must be understood of what is on the bar of each Pass; for immediately after passing the bar, which is very narrow, there are from 5 to 7 fathoms at all seasons.

COUNTRY EAST OF LAKE PONCHARTRAIN.

The country on the east side of Lake Ponchartrain to Mobile, and including the whole extent between the American line, the Mississippi above New Orleans, and the lakes, (with the exception of a tract of about thirty miles on the Mississippi, and as much square, contiguous to the line and comprehending the waters of Thompson's creek, Bayou Sara and Amet) is a poor thin soil, overgrown with pine, and contains no good land whatever, unless on the banks of a few small rivers. It would however afford abundant supplies of pitch, tar, and pine lumber, and would feed large herds of cattle.

NEW ORLEANS.

By recurring to maps and examining the position of Louisiana, it will appear, that the lower part projects considerably into the sea. It has in all probability been formed by the sediment brought down by the current and deposited on the flat coast. There is therefore on the east side but a very narrow slip along the bank of the river, from the sea to the Iberville. The land is not generally susceptible of cultivation more than a mile in depth from the river, the rest is low and swampy to the lakes and the sea, but in general, abounds with cypress timber, which is sawed by mills, which are worked by artificial streams from the Mississippi, in the time of freshes. They generally run five months in the year.

What has been said of the east equally applies to the west side of the river. The soil and situation are nearly the same. After leaving the bank of the river, there is an immense swamp, intersected by creeks and lakes extending to the high lands of Atacapas, and occupying a space of 30 or 40 leagues.

The city of New Orleans, which is regularly laid out on the east side of the Mississippi, in lat. 30 N. and long. 90 W. extends nearly a mile along the river from the gate of France to the south, to that of Chapitoulas above, and a little more than one third of a mile in breadth, from the river to the rampart; but it has an extensive suburb on the upper side. The houses in front of the town and for a square or two backwards, are mostly of brick, covered with slate or tile, and many of two stories. The remainder are of wood covered with shingles. The streets cross each other at right angles, and are 32 French feet wide. The squares

between the intersections of the streets have a front of 300 French feet. There is in the middle of the front of the city a place d'armes, facing which the church and town house are built. There are from 12 to 1400 houses in the city and suburbs. The population may be estimated at 10,000, including the seamen and garrison. It was fortified in 1793, but the works, originally defective, could not have been defended, and are now in ruins. The powder magazine is on the opposite bank of the river.

NUMBER OF INHABITANTS.

According to the census of Louisiana, including Pensacola and the Natchez, as made in 1785, the whole number of inhabitants amounted to 32,252, of which 14,215 were free whites, 1303 free people of colour, 16,544 slaves.

The statement from the latest document, makes the whole number 42,375—the free whites, 21,244—the free people of colour, 1768—and the slaves, 12,920. A conjectural estimation made by a gentleman of great respectability and correct information, residing at Natchez, raises the number of whites in the island of New Orleans, on the west side to 50,150, and the number of blacks to 30,820.

It is at all times difficult to obtain the full census of a country, and the impediments are increased in this from its scattered population. The actual enumeration may therefore fall short of the true numbers.

CULTIVATION OF SUGAR.

The sugar cane may be cultivated between the river Iberville and the city on both sides of the river, and as far back as the swamps. Below the city however the lands decline so rapidly that beyond 15 miles the land is not well adapted to it. Above the Iberville the cane would be affected by the cold and its produce therefore be uncertain. Within these limits the best planters admit that one quarter of the cultivated land of any considerable plantation may be planted in cane, one quarter left in pasture, and the remaining half employed for provisions, &c. and a reserve for a change of crops. One Pausian Arpent of 180 feet square may be expected to produce on an average 1200 weight of sugar, and 50 gallons of rum.

From the above data, admitting that both sides of the river are planted for 90 miles in extent, and about $\frac{3}{4}$ of a mile in depth, it will result that the annual product may amount in round numbers to 25,000 hogsheads of sugar,

with 12,000 puncheons of rum. Enterprising young planters say that one-third, or even one-half of the arable land might be planted in cane. It may also be remarked that a regular supply of provisions from above at a moderate price would enable the planter to give his attention to a greater body of land cultivated with cane. The whole of these lands as may be supposed are granted; but in the Atacapas country, there is undoubtedly a portion, parallel to the sea-coast, fit for the culture of the sugar cane. These vacant lands are to be found, but the portion is at present unknown.

In the above remarks the lands at Terre aux Bœuf, on the Fourche, Bayou, St. Jean, and other inlets of the Mississippi, south of the latitude supposed to divide those which are fit, from those which are unfit, for the cultivation of the cane, have been entirely kept out of view. Including these, and taking one third instead of one fourth of the lands fit for sugar, the product of the whole would be fifty thousand, instead of twenty five thousand hogsheads of sugar.

SUGARS EXPORTED.

The following quantities of sugar, brown, clayed and refined, have been imported into the United States from Louisiana and the Floridas, viz.

In 1799	773,542lb.
1800	1,560,865
1801	967,619
1802	1,576,933

IMPORTS AND EXPORTS.

The productions of Louisiana are—sugar, cotton, indigo, rice, furs and peltry; lumber, tar, pitch, lead, flour, horses and cattle. Population alone is wanting to multiply them to an astonishing degree. The soil is fertile, the climate salubrious, and the means of communication between most parts of the province certain, and by water.

20,000 bales of cotton, 3 cwt each, at 20 cents per lb.	$ 1,344,000	Increasing.
45,000 casks sugars, 10 cwt each at 6 cents per lb.	302,400	ditto.
800 do molasses, 1000 gallons each.	32,000	ditto.
Indigo,	100,000	Diminishing rapidly.

Peltry,	200,000
Lumber,	80,000
Lead, corn, horses, cattle,	uncertain
All other articles, suppose	100,000
Total	$ 2,158,000

According to the official returns in the treasury of the United States, there were imported into our territory from Louisiana and the Floridas, merchandize to the following amounts, in the several years prefixed:

In 1799 to the value of	$ 507,132
1800	904,322
1801	956,635
1802	1,006,214

[b] A fact relative to the existence of *silver mines* in Louisiana, may be mentioned here, on the authority of an old gentleman who had visited a mine in that country several times under the agency of a company in the western country.

This old gentleman assured me that a mine of silver had been discovered—that dollars had been coined, and all that could not be brought away were buried at the spot—that he had brought from thence horse loads of dollars at different times, and that he descended the Ohio for the purpose of renewing the company's funds about the year 1791, and that in this last trip one of his companions having unguardedly dropped a hint on the road of their pursuit, they were closely pursued and watched so narrowly, that when they got within two or three days journey of the mine, they were obliged, in order to deceive their followers, to run a contrary direction to that where they knew the mine lay; that after every manœuvre, they found it impossible to go to the spot without being discovered; they therefore after an absence of near two years, returned home, to the no small chagrin and disappointment of the company.

The old gentleman informed that this company consisted of about twenty of the principal men in this country, some of whom which he named, and who I have since heard of as belonging to such a company now reside in the Forks of Yough; that said company was formed about fifteen years prior to the time of this communication, which was made in 1793 or 1794. This old gentleman if he be still alive, must be about sixty years of age.

[c] Conversing a few days ago with a gentleman immediately from St. Louis, whose information may be relied on, and to whom I put some questions as to the existence of this salt mountain; he replied, that the account which had been published was probably incorrect as to the length and breadth of the mountain; but that in some places on the bank of a creek which washes it, it raises perpendicularly to the height of 300 feet; that the hunters had long been accustomed to get their supply of salt from this place, for

which they went out of their road fifteen miles; that the springs which issue out of these bluffs, bring with them vast quantities of salt, which may be scooped up at the foot of the hill by hogsheads full of good and pure salt; that the waters of a western branch of the Arkansas, which takes its rise from the springs of this mountain, are remarkably salt. He further observed, that high up the Missouri, there is a plain or prairie, whose surface is so hard that the foot of a horse scarcely makes any impression upon it; and that after a rain fall and then a warm sun, there is seen on the surface a fine and beautiful salt, as fine as the finest used on tables; that the Indians scrape this up for their own use with their hands or the wing of a turkey. This gentleman had different specimens of the salt of that country with him, which he intended presenting to the president of the United States, and to Congress now in session.—1805-6.

The same gentleman observed, that a considerable distance back of St. Louis there is a large pareel or body of both animal and human bones, mixed altogether promiscuously over a space of ground of 300 yards, some lying, and others sticking up; that a large tooth found here had been presented to the baron Carondelet, while in that country, who pronounced it to be the tooth of an elephant.

Directions to Captains of Vessels bound to the Mississippi.

THE mouth of this river is in lat. 29° 6′ N. Try to keep in the latitude, and bring the Blockhouse to bear W. N. W. 3 degrees N. and run for it;—May run into 10 fathom water with safety, and anchor if necessary.—The anchorage is good every where. When in and bound up the river with a trading wind, run from point to point, taking care to keep out of the bends. If obliged to anchor, be careful to come too on the point.

A brief account of the Missouri river, and the extensive and fertile country through which it winds, as traversed by Captain Lewis and Captain Clark—A short notice of the Indians and their customs—different kinds of wild animals—fowls—fish—curiosities &c.—And of the Columbia river.

THE Missouri river for a series of years prior to the Voyage of Discovery under Captain Lewis and Captain Clark, had become a subject of much interest and speculative conversation among all classes of people of the United States. Like all subjects of history, of which we know only a part, it became the more interesting and much more curiosity was excited, on account of its sources never hav-

ing been known or explored. And on account of an idea having prevailed that a nation of white people, supposed to be Welsh, lived high up towards its head. A thousand conjectures were constantly afloat, until the return of the fortunate travellers, whose letters and publications give us data to go upon of the most authentic and respectable kind.

Shortly after the acquisition of Louisiana, this voyage was set on foot by Mr. Jefferson, President of the United States; and after selecting men who appeared to be the best calculated for so serious and important an undertaking, the party consisting of 45 men, collected prepared for the journey at the mouth of the river Du Bois or Wood river, one mile below the mouth of the Missouri; from which place they set out on their intended Voyage of Discovery, on Monday the 14th of May 1804, all in health and spirits.

For about 100 miles up the Missouri there are several settlements of white people; among these are the villages of St. Charles and St. John's, which are the principal ones; St. John's being the uppermost and the last on the river. The country is rich and level, bearing cotton wood, sycamore, oak, hickory, &c.

About 200 miles up, the river becomes very broad, measuring 875 yards across, and 50 miles above, narrows again to 300 yards in breadth. The Osage river now enters the Missouri; it is tolerably extensive, and is 197 yards across. It takes its name from the Osage nation who reside on its borders, and who are a remarkably tall, large, and ferocious set of people, making all other nations fear and dread them. The extensive prairies now begin to shew themselves, over which the eye is carried for miles without a single tree to stop the view.—Mulberry trees are numerous along the banks of the river.

The Kanzas river, whose soil and country is claimed by the Kanzas nation of Indians, flows through a fine rich country, and where it enters the Missouri it is 230 yards wide. It is about 650 miles above the mouth of the Missouri.—Grapes are found here in abundance, and the country is one continued prairie. Iron ore sometimes discovers itself on the sides of the bluffs or high banks of the river.

The Platte river is a beautiful stream, gentle in its current, and said to wind several hundred miles through the country, and where it enters the Missouri it is three quar-

ters of a mile broad. It empties itself in on the south side. It is about 330 miles above the Kanzas river, and the party reached it in about 60 days. Up this river there are three nations of Indians, the Otos, Panis, and Loos or Wolf Indians.—Beaver are frequently seen and shot by the party. Country flat but well timbered—deer plenty and some prarow, which are about the size of a ground hog and nearly of the same colour.

On the third of August, our party held a council with the Otos and Missouris Indians, who appeared well pleased with the change of government. Six of them were made chiefs and presented with some trinkets. By observation the latitude was found to be 41°. 17′. N.—A pelican was killed whose bag or pouch held five gallons of water—elk are plenty.

The Missouri now becomes very crooked and serpentine—some high land appears—with large prairies—Pike, cat and sunfish are plentifully caught with hook and line.

Ignorance is the parent of superstition. As an instance of this the party visited a hill which the natives dare not approach on account, they say, that it is the residence of a little people of whom they are afraid.

On the 20th August one of the men of the name of Floyd a sergeant, died at Floyd's river, where he was decently interred.—The bluffs which approach high on the river are of different colours, white, black, &c. On the 30th August, a council was held with the Sioux nation of Indians, with whom a peace was made and several dignified with the appellation of chief.—But before they set in council they went through the ceremony of dancing backwards, and singing around the camp. Their instruments of music are dried skins filled with pebbles ; the shaking of these mixed with the voice, make a kind of jargon they seem to be very fond of.

In some of the hills which approach close to the river, copperas, and allum were discovered—And old fortifications in this country as well as in ours, are sometimes met with. The party visited one whose two ends run at right angles to the river, and whose outside was 2500 yards in length.

Buffaloe, goats, antelopes, prairie dogs, and white wolves are frequently killed by the party—On the 8th September they passed a trading house which was built by the traders from St. Louis, in 1796. On the 10th September they

found on a high bluff the skeleton or back bone of a fish 45 feet long. It being in a state of petrifaction and considered a curiosity, part of the bones were preserved and sent back with the party who returned from fort Mandan to St. Louis, whence they were conveyed to the city of Washington, as a present for the President of the U. S.

One of the men got lost, and was absent 16 days ; his ammunition failing, he subsisted 12 days solely on grapes and berries.—Salt springs are now and then met with off from the river.—The river gets shallow and the current rapid, so much so that the boats have to be pulled by hand over the sand-bars, ripples, &c.—Musquitoes are very troublesome—porcupine, hares and beaver caught.—Black tailed or mule deer are numerous, and frequently killed by the party.

The Missouri has some fine wide bottoms on each side, which are covered with a great variety of wood, among which is a good deal of cedar.—The black bluffs frequently approach to the banks.

The Sioux, Mahas, Algonquins and Rickaree Indians appear to have some notion of agriculture. Their squaws have gardens, and they raise beans, squashes, and tobacco. They have also large cornfields—The Mandans are also industrious in this way. These nations overrun a large space of country, and reside about 1500 miles from the mouth of the Missouri.

On the 22d Sept. they passed a fort built on an island in the Missouri by a trader of the name of Lucelle.—The Indians here have a singular method of making their dogs useful, and subservient to their idle habits. They cut long poles, which they make into a kind of car, and on them they tie their skins and other articles ; the cars are then fastened to the dogs, who drag them thus loadened from camp to camp, each dog hauling about 70 pounds.—With almost all idle and rude nations, the custom of training dogs to labour, seems to be more or less prevalent.

In treating with the Sioux nation, our commanders, Lewis and Clark, were made to get into a buffaloe robe one at a time, and were thus carried by eight men to the council house. Dogs were killed by the Indians for the party to feast on. The Indians eat and smoked during the day, the women passed the night in dancing. This nation have about 80 lodges, each containing 10 persons. Their clothing is

principally of the buffaloe hides, which are dressed and prepared by the women. The huts or lodges are also covered with buffaloe robes. They are a friendly people, disposed to pilfer, and very dirty. Their band of music consists of ten or more men beating on a buffaloe hide, and shaking little bags filled with small stones. The women participate in these feasting dances by forming into a solid column around the fire with sticks in their hands, on which are generally fastened the scalps of an enemy over whom they have been victorious. They keep moving altogether around the fire, jumping, or rising and falling on both feet, sometimes half bent other times quite erect, singing and yelling a song understood only by themselves.

A council was held also with the Rickarees, who live several days journey above the Sioux nation. Our party gave them some presents, and in return they got corn, beans, and tobacco.

The goats and buffaloe become very numerous; hundreds are seen in a flock on the sides of the hills.—The bottoms are covered with cotton wood, but the hills are very naked.—A stratum resembling coal appears on the side of a bluff.

Our party arrive at the villages of the Mandans, among whom they found an Irishman. They halted here to hold a council with the natives, and to prepare for winter quarters, it being the 27th of October.

In a few days the principal men of each village of the Mandans, the Watasoons, Sioux and Grossventers assembled and sat in council, in which Captain Lewis delivered a speech, explaining the change in the government, and the wish of the president of the United States to befriend all the tribes, and be considered by them as their Great and Good Father. The chiefs manifested satisfaction, and each was presented with a new suit of clothes and a medal.

Winter quarters were now seriously thought of, and a place being fixed upon, a fort was erected in two or three weeks, which was called *Fort Mandan*. It is 1610 miles from the mouth of the Missouri, in lat. 47° 21′ 32″ N.—During the winter which was very cold, the party spent their time principally in hunting, and keeping up a friendly intercourse with the natives, from whom they received much friendship and attention, being supplied by them with corn, beans, tobacco, and buffaloe robes.

Buffaloe and deer are very numerous here. The Indians have a singular method of hunting the buffaloe on horseback: They approach close enough to shoot them with their bows and arrows; but on firing the horse is trained to turn and fly off immediately, for fear of an attack from the wounded buffaloe, who in this case is remarkably ferocious.

These tribes do not bury their dead, but wrap the corpse up in a buffaloe robe, and lay it on a scaffold, exposed to the sun and weather.—The manner in which they keep their horses through the winter is thus: They let them run out in the woods in the day time, and get what they can; and at night they lodge in the same hut with their masters, and are fed upon cotton wood branches; in this manner they winter tolerably comfortable.

On the 7th April, 1805, a periogue with 13 men, was dispatched from Fort Mandan for St. Louis, with dispatches to the government, together with a variety of curiosities for the president.—On the same day, the party, consisting of 31 men, and a squaw, their interpreter's wife, left Fort Mandan and proceeded on their voyage up the river.

A few days journey above Fort Mandan, they discovered a bluff which had been lately on fire, and which had thrown up abundance of pumice stone. The place smelt strongly of sulphur.—This accounts for the pumice stone having frequently been found floating on the Missouri.

About 90 miles above the Mandan villages the Little Missouri empties in on the south side. It resembles its namesake exactly in the colour of its water, current, and taste.—Some of the tops of the hills here as white as chalk.—The hills generally, begin to grow larger; the bottoms pretty much the same as lower down.—Bears, antelopes or goats, wild geese, buffaloe, deer, elk and beaver are very numerous.—The river gets rapid and very crooked.—Very little rain or dew in these parts.

Two hundred and seventy-eight miles above Fort Mandan, 186 from the Little Missouri, and 1888 from the mouth of the Missouri, the Jaune or Yellow-stone river empties in. It is 858 yards wide at its mouth, and the Missouri is at this place 527 yards broad, and is deep and rapid in its current and full of sand-bars.—The Yellow-stone is very shallow.

Very large brown and white bears, which are very powerful and ferocious, and had several times like to have killed

some of the hunters.—Hills covered with pine and cedar, the bottoms with cotton wood—country more broken.—River beautiful and 300 yards broad--its waters become more clear.—In lat. 47° 00′ 24″ N. the Muscle-shell river empties in on the south side, 660 miles above Fort Mandan; it is 110 yards broad. The Missouri here is 222 yards wide.—The Ibex or mountain sheep are tolerably plenty—A large rapid in the river; with much difficulty the canoes were got through it.—The country presents little else to view but scenes of sterile barrenness—the bed of the river is rocky.—The Indians drive the buffaloe down precipices, and in this manner kill great numbers of them.—Buffaloe paths 10 feet wide.—Curious cliffs 200 feet high and not more than 10 feet thick; at a distance these peaks look something like the remains of an ancient city.—The country is more pleasant—wide timbered bottoms—fine islands in the river, covered with willows and cotton wood. A large mountain sheep killed whose horns weighed 25 pounds: hills perfectly bare of timber. A plant resembling flax grows in the bottoms in great abundance.

On the 2d of June, the party arrived at the forks of two rivers, in lat. 47° 24′ 12″ N. Some difficulty arose which of those rivers was the Missouri, or which would afford the best navigation, and lead the nearest to the course they wished to pursue. After sending a party up each branch 50 or 60 miles, they returned and determined the south branch to be the Missouri, and that which afforded the best navigation; it is 372 yards broad; and the north branch which they called Maria's river, is 186 yards wide. After burying here 1000 pounds of their stores and baggage, they pursued their voyage up the south branch. Goose, choak, straw and rabbit berries are numerous. Both these rivers abound in fish. The south branch had for 2 or 3 days the appearance of claret, but again assumed its usual muddy colour. This red colour of the water must arise from the number of red cliffs on the river, which crumble and cave in every rain that falls. The river becomes rapid and in some places difficult to ascend; and full of small islands.

On the 14th June they arrived at the rapids below the great falls of the Missouri. Here they were tightly engaged in transporting their effects around the portage, until the 3d of July. These falls are 18 miles long, and in that distance descend 362 feet 9 inches: The first great

pitch is 98 feet, the second 19 feet, the third 47 feet 8 inches, the fourth 26 feet, and other small pitches and rapids, amounting in the whole to 362 feet 9 inches.

On the 27th June a dreadful hail storm fell, and hurt some of the men very much; some of the stones weighed 3 oz. and measured 7 inches in circumference. At these falls are some beautiful springs of transparent water. Buffaloe, bears and wolves are seen here in droves, which afford fine sport for the hunters. Several new canoes are built here, and the men finish the last of their spirits before they depart from the landing above the falls. From observation, the falls are in lat. 47° 3′ 10″ N. and 2575 miles above the mouth of the Missouri.

From hence the party ascended the Missouri, and penetrated the Rocky mountains at the distance of 71 miles above the upper part of the portage, and penetrated as far as the Three Forks of that river, a distance of 180 miles further: Here the Missouri divides into three nearly equal branches at the same point. The two largest branches are so nearly of the same dignity, both measuring 60 yards across, that the officers did not conceive that either of them, could with propriety, retain the name of Missouri; and therefore called the north branch JEFFERSON, the west or middle branch MADISON, and the south branch GALLATIN rivers. The confluence of these rivers, at which they arrived on the 27th July, is 2848 miles from the mouth of the Missouri, by the meanders of that river, and in lat. 45° 22 34 N.

The most northerly of the Three Forks, that to which they had given the name of Jefferson river, was deemed the most proper to ascend, and they accordingly ascended it 248 miles to the upper forks, and its extreme navigable point; making the total distance to which they had navigated the waters of the Missouri 3096 miles, of which 429 lay within the Rocky mountains, and for that distance the Missouri is difficult of navigation; being quite narrow in some places, very rapid, full of rocks, and closely bounded by very high hills on both sides; sometimes, however, the hills recede and leave fine open vallies in which are found great numbers of black, white and yellow strawberries, goose, service and cheak-berries. Spruce, cedar and cotton wood trees on the shores. A rattle-snake is seen—A mountain appears in sight covered with snow, July 28, while at the Three Forks—Buffaloe become very scarce, and but a few deer or goats are seen. An island in Jefferson river exactly 3000 miles from the mouth of the Missouri, they therefore called it the *Three Thousand Mile Island*—Otter and beaver plenty—canoes are obliged to be dragged frequently, owing to the shallowness of the river—a few fish of different kinds, some black trout.

At the head of Jefferson river, which they reached on the 17th of August, the party met with some of the Shoshone Indians, who live on the head waters of the Columbia river; with whom a talk was held, and they consented to assist in transporting the party's

baggage over the mountains to the Columbia river, a distance of about 40 miles, and in giving every information of the best route to be pursued.

The Shoshones have a singular mode of address:—instead of shaking hands as a token or mark of friendship, they put their arms around the neck of the person they salute. This tribe lives very miserable; their principal food being dried fish and berries.—They have great numbers of horses, on whose flesh they are sometimes obliged to subsist.

The party having purchased 27 horses of these Indians, and engaged a guide; and every thing being in preparation, they sat forward from the upper forks of Jefferson river on the 31st August, through these tremendous mountains, in which they continued until the 22nd September before they reached the lower country beyond them. On their way they met with the Olelackshoot, a band of the Tukapaks, from whom the party obtain 7 horses more; this proved of infinite service to them, as they were compelled to subsist on horse flesh about 8 days before they reached the Kooskooske.

During the passage over the mountains the party suffered every thing which hunger, cold, and fatigue could impose, nor did their difficulties with respect to provisions, cease on their arrival at the Kooskooske; for although the Pallotepallars, a numerous nation inhabiting that country, were extremely hospitable, and for a few trifling articles furnished them with an abundance of roots and dried salmon, the food to which they were accustomed, the party found they could not subsist on these articles; and almost all of them got sick on eating them; they were therefore obliged to have recourse to the flesh of horses and dogs, there being little or no game to be had in those parts.

Having built some periogues, they re-embarked for the Pacific Ocean on the 7th of October; and continued down the Kooskooske 73 miles, Lewis's river 154 miles, and the Columbia 413 miles to the Pacific Ocean, making the total distance from the confluence of the Missouri and Mississippi, to the discharge of the Columbia into the Pacific Ocean 3555 miles.

The natives are extremely numerous in this country, and proved very friendly; but the party on several occasions owed their lives, and the success of their enterprize, to their number. On the 17th November they reached the ocean; where in a fort erected by the party on the south side of a little river called by the natives *Netul*, which discharges itself at a small bar on the south side of the Columbia, and 14 miles within Point Adams, they remained during the winter. This place they called *Fort Clatsop*, after a nation who were their nearest neighbours.—Elk, which are numerous here, formed their principal food during their winter quarters at this place.

The natives of this country have a singular method of creating fire by friction: They take two small sticks of wood, and laying one horizontally with its flat side up, the other is smartly rubbed on it perpendicularly, and after a few minutes rubbing, the smoke begins to rise, and shortly after a blaze, which fires the two sticks.

Man the greatest enemy of man—Some of the poor natives of the

mountains, on being approached by the travellers, *fled from their camps crying*—but they were called back, and after being reconciled, presented the party with some berries and fish to eat. These poor and almost destitute creatures, make a kind of bread with the seeds of berries and roots pounded up together, then steamed, and baked on a kind of kiln.

The manner of their taking fish, is by fixing a sharp bone to the end of a long pole, and with this kind of spear they strike the fish with great dexterity. Some of the nations catch goats by running them down on horseback.—In the warm season they seldom have any other clothing than that which nature was pleased to bestow on them.—In the winters, which are intensely cold, they clothe themselves with a kind of robe made of the skins of the buffaloe, goats, bears, deer, otter, beaver, &c.—and dried salmon is their principal food. They work, very ingeniously, baskets of willow, with which they carry their water for drinking, cooking, &c.

The Flathead nation are said to be very friendly and much whiter than their neighbours. Their women form of small twigs a very ingeniously made comb, with which they comb their long black hair.

The Columbia river (which comes in from the north-west) where Lewis's river joins it, is 860 yards wide, and the latter 475 yards. They were both very low when our travellers descended them. The confluence of these rivers from observation is in Lat. 45°. 15′ 13″. 9 N.—As is the case with all our aborigines, the natives here bury all the property of the deceased with the corpse; even the canoe is split in pieces and set up around his grave.—The natives make their lodges with bulrushes and flags formed into a kind of mats—Geese and pelican—extensive plains and vallies.

About 75 miles below the junction of the Columbia and Lewis's rivers, is a fall of 37 feet 8 inches in the distance of 1200 yards; the greatest pitch being 20 feet perpendicular. For three miles below these falls the river is very deep and narrow, being but about 70 yards wide, and bounded by rocks. The latitude of this place is in 45°. 42′ 57. North.—Sea otters are seen swimming in the river, swan, ducks, gulls, brant, &c.—Springs of fine water fall 200 feet perpendicular.

The women near the mouth of the Columbia dress in a long fringe made of soft bark; this they tie round their waists, and it hangs down almost to their knees: another part of their dress consists in skins cut in thongs, and wove something like carpetting--A bay 12 or 14 miles wide—water salt.—The sea appears in view; and the great object of the voyage is now completely accomplished, that of discovering the best and nearest route by way of the Missouri and Columbia rivers to the Pacific ocean.

The river opposite Fort Clatsop, is 3 miles and 660 yards wide. The bay near the fort is in lat. 46° 19′ 11″ north—The Indians here make a hat of the bark of white cedar and bear grass, ingenuously worked, and which is water proof—Wapto roots and dried salmon their principal food—very little game about the sea shore.

Notwithstanding the season, January 1, 1806, the ticks, flies and insects are numerous—one of the men swim across a river after a

raft. The skeleton of a whale was found on the sea shore, which measured 105 feet in length, and its head 12 feet—Trees of the fir kind grow here 12 or 15 feet in diameter—a supply of salt is made by our party from the sea water—the store of tobacco being exhausted, the men make use of crab-tree bark as a substitute.

The party having satisfied themselves with viewing the country, and making as much friendship with the natives as possible, during their winter quarters at the mouth of the Columbia, and having got things in preparation, they sat out up the river again on their homeward bound voyage, on the 27th of March 1806; and after crossing the Rocky mountains, on which they were detained by the impenetrable snows until the 24th of June, they again reached the Missouri and descended that river, and landed at St. Louis on the 23d September 1806, after an absence of two years, four months, and ten days, having lost but one man whose death has been already mentioned, during the voyage.

The feelings of the fortunate travellers after a return from so perilous a voyage; the joy evidently expressed in the countenance of the inhabitants of St Louis, may be better imagined than correctly described—and the advantages resulting from this voyage of Discovery, to the trade and commercial interests of the United States, will no doubt be very great in a few years, and more particularly so to the people of the Western Country.

"I consider this tract across the continent of immense advantage to the fur trade, as all the furs collected in nine tenths of the most valuable fur country in America, may be conveyed to the mouth of the Columbia, and shipped from thence to the East Indies by the first of August in each year; and will of course reach Canton earlier than the furs which are annually exported from Montreal arrive in Great Britain."*

Mr. Clark does not hesitate to declare that they have discovered the best route, such as nature has permitted, which does exist across the continent of North America in that direction; such is that by way of the Missouri to the foot of the rapids below the great falls of the Missouri river, a distance of 2575 miles, thence by land passing by the Rocky Mountains to a navigable part of the Kooskooske, 340 miles, thence to the ocean by the rivers before described.—The passage by land of 340 miles from the falls of the Missouri to the Kooskooske, is the most formidable part of the tract proposed across the continent: of this distance 200 miles is along a good road, and 140 over tremendous mountains, which for 60 miles are covered with eternal snows.

* *Captain Clark's letter to his brother Gen. Clark, near Louisville.*

P. S. In compiling these few pages respecting the Missouri, we have had frequent recourse to "Gass's Journal", published in Pittsburgh by Mr. David M'Keehan. It is the daily journal of Mr. Patrick Gass, who was one of the party during this interesting voyage.

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